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BALTIMORE, APRIL 6, 1911.

SOUTHERN MANUFACTURING.

Southern manufacturing is rapidly approaching an annual production to the value of \$3,000,000,000. That sum is more than twice the value of the products of Southern manufacturing in 1900. Hints of development in this line are given in the following table, comparing the capital invested in Southern factories and the value of their products in five Southern States in 1900, 1904 and 1909:

Factory Progress, 1900-1904.

States.	Capital.		Products.	
	1900.	1904.	1900.	1904.
Alabama.....	\$60,166,000	\$105,383,000	\$72,110,000	\$109,170,000
Florida.....	25,682,000	32,972,000	34,184,000	50,298,000
Louisiana.....	100,875,000	150,811,000	111,398,000	186,380,000
Maryland.....	149,155,000	201,878,000	211,076,000	243,376,000
North Carolina.....	68,283,000	141,001,000	85,274,000	142,521,000
Total.....	\$304,161,000	\$632,045,000	\$514,042,000	\$731,745,000

Factory Progress, 1904-1909.

States.	Capital.		Products.	
	1904.	1909.	1904.	1909.
Alabama.....	\$105,383,000	\$173,479,000	\$109,170,000	\$146,431,000
Florida.....	32,972,000	65,128,000	50,298,000	72,724,000
Louisiana.....	150,811,000	221,806,000	186,380,000	222,928,000
Maryland.....	201,878,000	251,237,000	243,376,000	317,570,000
North Carolina.....	141,001,000	217,182,000	142,521,000	216,614,000
Total.....	\$632,045,000	\$928,833,000	\$731,745,000	\$977,267,000

Between 1900 and 1904 the capital in factories in these States increased from \$304,161,000 to \$632,045,000, or by \$327,884,000, equal to 56.3 per cent., and the value of their products from \$514,042,000 to \$731,745,000, or by \$217,703,000, equal to 42.3 per cent. In the next five years the increase in capital was from \$632,045,000 to \$928,833,000, or by \$296,788,000, equal to 46.9 per cent., and in the value of products from \$731,745,000 to \$977,267,000, or by \$245,522,000, equal to 33.5 per cent.

The value of products in the five States in 1904 was 40.9 per cent. of the total value, \$1,787,976,000 in the South.

If the proportion was maintained in 1900 the total in the South was \$2,389,400,000.

If the rate of increase in the value of products in the five States between 1904 and 1909, which was 33.5 per cent., was the average rate of increase for the whole South, the total value in 1909 was \$2,385,800,000.

These figures, it must be remembered, deal with the value of factory products only, and do not include the value of hand trades, building trades and neighborhood industries, which constituted about 16 per cent. of the total value of manufactured products in 1900. If that proportion was maintained, the total in 1909 was about \$2,850,000,000, and fifteen months have passed since the census year.

THE NATIONAL MARKET GARDEN.

Cabbages are being shipped to Northern markets from the lower Rio Grande Valley in Texas at the rate of twenty express carloads a day. Large shipments of Bermuda onions have already been made from Laredo and other points in the same State. Peppers, egg-plants, tomatoes, lettuce, celery, cauliflower and beans have been moving from Florida for some time, and the early strawberries are now on the move. Potatoes and other vegetables from Florida; beets, carrots, turnips, parsley, radishes, etc., from Louisiana and Mississippi, and asparagus from Georgia, Carolina and Alabama are upon the Cincinnati markets, and Boston is also enjoying the first fruits of the kind from the South. The business of that section of supplying the country with early fruits and vegetables to the annual value of about \$100,000,000 is well under way for 1911, and an interesting sidelight upon

controlled by them and the names of their shipping points, of which 460 are in the Southern States mentioned.

Mention of the products that are shipped annually from these Southern points is suggestive of the wide range. The products include Irish potatoes, sweet potatoes, peaches, pears, peanuts, strawberries, beets, beans, plums, peas, squashes, melons, raspberries, okra, sugar-cane, asparagus, cabbages, figs, tropical fruits, snaps, pecans, lettuce, apples, turnips, cucumbers, cherries, grapes, celery, onions, cantaloupes, nursery stock, etc., and they come from little tracts of from one to a dozen acres, or from larger tracts of from 100 to 600 acres or more. Running through the tabulated statement, filling more than eighty pages of this pamphlet, one cannot fail to be impressed with the great variety of fruits and vegetables in the South, the steadily increasing number of persons engaged in growing them and the many opportunities in that line for success in the orchards, the truck lands and the vegetable gardens in the South. The circulation of this pamphlet is but a part of the unremitting, intelligent work that Mr. Richards has been doing for the development of the South in his twenty odd years' connection with the Southern Railway.

A GLANCE AT RAILROAD BUILDING.

Since the beginning of this year there have been reported in the columns of the MANUFACTURERS RECORD twenty-four wholly new railroad enterprises in the South, which propose to build a total of about 2400 miles of line. Including Oklahoma and Missouri, two more companies are added, but they alone are proposing to build 1300 miles, which would make the entire amount projected 3700 miles. These companies are distributed thus: Three in Alabama, one in Arkansas, three in Florida, five in Georgia, one in Kentucky, one in Missouri, three in North Carolina, one in Oklahoma, three in South Carolina, one in Tennessee, two in Texas, one in Virginia and one in West Virginia, making altogether twenty-six new railroads planned.

If this degree of activity continued the year 1911 would witness something like twelve or fifteen thousand miles of new railroads projected for the States under consideration, but it is hardly probable that so much construction will be planned and much less will be executed. Nevertheless, considerable of that which is proposed will be realized in completed lines, and the activity of promoters during the first three months of this year deserves attention. Some of the work projected demands special notice. One piece is that of the Kansas City & Memphis Railroad Co., which proposes to construct a line 350 miles long across Arkansas. Another is the Atlantic, Okeechobee & Gulf, which, as heretofore noted, aims to build a line spanning the peninsula of Florida from

Tampa on the west coast to Miami on the east, with several important branches, making altogether for this one company about 600 miles of line. The Gulf, Florida & Alabama Railway is another noteworthy plan, which is for the construction of a railroad from Pensacola northward through Florida and Alabama for 300 miles. The Atlantic, Waycross & Northern is a Georgia enterprise for a road 200 miles long across the State from St. Mary's via Waycross to a connection with the Georgia Southern & Florida Railway. The largest of all the plans reported, however, is that of the Colorado, Oklahoma & New Orleans Railroad Co., which proposes to build a main line from Trinidad, Colo., to New Orleans, about 1200 miles, but branches may swell the total to 1700 miles, although that is indefinite. The Piedmont & Northern, which is the name of the company building the important electric inter-urban railway in the Carolinas for the Messrs. Duke, who dominate it, has been recently mentioned in detail, and demands notice here only because it is a recent incorporation and work upon the line has just begun.

Although they were not lately chartered, the starting of construction recently upon the Buckhannon & Northern Railroad and the Sandy Valley & Elkhorn Railway compels mention here as being among the interesting accomplishments during the first quarter of 1911. Each is an important coal railroad, one to develop West Virginia lands held by the Little Kanawha syndicate and the other to open up rich coal territory in Kentucky for the Consolidation Coal Co. The Florida East Coast Railway has also lately begun construction of its line from Maytown to Lake Okeechobee, a remarkable piece of enterprise which will open for use rich farming and fruit lands in the Everglades region of Florida. The Chattanooga Southern—now called the Tennessee, Alabama & Georgia—has also started work upon an extension which is to make a short route from Chattanooga to Atlanta. It furthermore proposes to build a line from Gadsden to Birmingham. Contract has also been let for much of the St. Louis & Kansas City Electric Railway, a high-speed line to connect the two cities named.

There may also be mentioned some of the more conspicuous pieces of railroad work under way and on which construction is being pushed. They include the Western Maryland extension to Connellsville, the Florida East Coast extension to Key West, the Pensacola and Mobile Railway, John T. Cochrane's two lines in the western part of Alabama, the extension of the Lexington & Eastern Railway in Kentucky, the Wasioto & Black Mountain Railroad in the same State, the Harri-man & Knoxville line in Tennessee, the Memphis, Dallas & Gulf in Arkansas and the Port Bolivar Iron Ore Railway in Texas, besides others too numerous

to name. It appears, too, that the long-talked-of electric lines from Fort Worth to Cleburne, Tex., and from Dallas to Waxahachie in that State are likely to be built, steps having been taken by important interests to construct them.

Judging by the facts here presented, and many others of similar tenor, the opinion may be expressed that 1911 will see the construction in the South and Southwest of a liberal amount of new railroad, the record of which will be in pleasing contrast to the small amounts noted for the last two calendar years.

POINTERS ON SOUTHERN PROGRESS.

Proposals for bids on improvements in divers parts of the South under municipal, county or State auspices alone to the number of more than one hundred and twenty-five were announced in March in the Construction Department of the MANUFACTURERS RECORD. That was at the rate of at least four a day. The proposals, definite statements of work to be done or supplies of various kinds desired, constituted less than one-fifth of the 663 items mentioned during the month in the Machinery, Proposals and Supplies Wanted columns of the Construction Department. The proposals are those of officials in cities, towns, counties and States, and do not include offers of the kind from representatives of the several departments of the National Government, corporations, contractors or other individuals. The range of activities contemplated in them, the range both as to localities interested and as to the character of the undertakings, reflecting the purpose of the South to spend money liberally in public improvements, is indicated in the following summary of the distinct lines upon which the proposals bear:

Bridges.—Danville, Va.; Holmes county, Miss.; Jefferson county, Ala.; Lawrence county, Miss.; Monroe county, W. Va.; Oklahoma City, Okla.; Ouchita county, Ark.; Page county, Va.; Richland county, S. C.; St. John county, Fla.; Spotsylvania county, Va.; and Wetzel county, W. Va.

Electric Light or Power.—Baltimore, Md.; Galveston, Tex.; Jackson, Tenn.; Jacksonville, Fla.; Kansas City, Mo.; Newton, Miss.; Richmond, Va.; and Troy, Ala.

Fire Department.—Baltimore, Md.; Dallas, Tex.; Kansas City, Mo.; and Memphis, Tenn.

Levees.—Desha county, Ark.; East Carroll and Madison parishes, La.

Roads.—Bexar county, Tex.; Caroline county, Md.; Dallas county, Ala.; Dallas county, Tex.; DuVal county, Fla.; Elmore county, Ala.; Fayette county, Ky.; Galveston county, Tex.; Grenada county, Miss.; Hamilton county, Fla.; Harris county, Tex.; Lauderdale county, Miss.; Monroe county, W. Va.; Oktibbeha county, Miss.; Oklahoma City, Okla.; Putnam county, Tenn.; Rappahannock county, Va.; Richland county, S. C.; Russell county, Ala.; and Talbot county, Md.

Sewers or Drains.—Baltimore, Md.; Cameron, Tex.; Easton, Md.; Holdenville, Okla.; Louisville, Ky.; Meridian, Miss.; Moundsville, W. Va.; Muskogee, Okla.; Norfolk, Va.; Oklahoma City, Okla.; Rock Hill, S. C.; and Sparta, Ga.

Streets.—Atlanta, Ga.; Baltimore city, Md.; Baltimore county, Md.; Beaumont, Tex.; Birmingham, Ala.; Chattanooga, Tenn.; Columbia, S. C.; Columbus, Miss.; Dublin, Ga.; Elizabeth City, N. C.; Dallas, Tex.; Fayetteville, N. C.; Fort Worth, Tex.; Gadsden, Ala.; Galveston, Tex.; Hugo, Okla.; Jackson, Tenn.; Knoxville, Tenn.; Latta, S. C.; Memphis, Tenn.; Newellton, La.; Newport News, Va.; Oklahoma City, Okla.; Portsmouth, Va.; Richmond, Va.; Troy, Ala.; Wilmington, N. C.; and Windsor, Va.

Water-works.—Caldwell, Tex.; Dallas, Tex.; Electra, Tex.; Gadsden, Ala.; Harrison county, Miss.; Kansas City, Mo.; Jacksboro, Tex.; Lufkin, Tex.; Morehead City, N. C.; Nashville, Tenn.; Norfolk, Va.; Richmond, Va.; St. Augustine, Tex.; Sparta, Ga.; and Tulsa, Okla.

Miscellaneous.—Automobiles for fire department, Baltimore, Md.; clock and bell

system, District of Columbia; coal supplies, Baltimore, Md.; ranges and equipment, District of Columbia; dam and spillway, East Land, Tex.; drainage, 437,240 cubic yards, Iredell county, N. C.; dredging, harbor work, Baltimore, Md.; electric elevator for county courthouse, Dallas, Tex.; garbage-disposal plant, Louisville, Ky.; heating system, District of Columbia; laboratory equipment, Little Rock, Ark.; oil tanks and connections, District of Columbia, and oil-burning equipment, Houma, La.

These proposals were less than one-fortieth of the total number of items mentioned in the Construction Department in March, dealing with hundreds of industrial and developmental enterprises calling for materials, machinery, money and men as a part of the steady growth of the South in manufacturing, mining, agriculture, lumbering, railroad building and other lines increasing its trade and commerce, and the March items in the department of fresh news about Southern progress were about 38 per cent. of the items mentioned since the beginning of 1911.

A survey of the material published by our Construction Department during the three months of this year shows a total of 13,296 items—a slight increase over the corresponding period of 1910. As usual, the presentation of these items has been of immense interest to a vast number of people engaged in the varied and multiplied business interests of the South and neighboring sections. The extent, variety and quality of the work is evidenced by the statistics of the following condensed table:

Synopsis of Construction Department, MANUFACTURERS RECORD, covering the months of January, February and March, 1911.

Total of items to April 1.....	13,296
January.....	3,814
February.....	4,408
March.....	5,074
Construction.....	11,063
Machinery, Proposals and Supplies Wanted.....	1,721
Burned, etc.....	512
Divided in detail as follows:	
Bridges, Culverts, Viaducts.....	231
Canning and Packing Plants.....	79
Clayworking Plants.....	76
Coal Mines and Coke Ovens.....	149
Concrete and Cement Plants.....	21
Cotton Compresses and Gins.....	81
Cottonseed-oil Mills.....	32
Drainage and Irrigation.....	52
Electric Light and Power.....	293
Fertilizer Factories.....	50
Flour, Feed and Meal Mills.....	62
Foundry and Machine Plants.....	159
Gas and Oil Developments.....	121
Ice and Cold-storage Plants.....	127
Iron and Steel Plants.....	14
Land Developments.....	302
Lumber Manufacturing.....	397
Metal-working Plants.....	34
Mining.....	152
Miscellaneous Construction.....	116
Miscellaneous Enterprises.....	592
Miscellaneous Factories.....	810
Railway Shops, Terminals, Round-houses, Sheds, etc.....	59
Road and Street Work.....	526
Sewer Construction.....	236
Telephone Systems.....	137
Textile Mills.....	108
Water-works.....	351
Woodworking Plants.....	210
<i>Railroads.</i>	
Steam.....	676
Street.....	100
<i>Buildings.</i>	
Apartment-houses.....	176
Association and Fraternal.....	173
Bank and Office.....	399
Churches.....	379
City and County.....	221
Courthouses.....	87
Dwellings.....	1,223
Government and State.....	84
Hotels.....	279
Miscellaneous.....	255
Railway Stations.....	131
Schools.....	533
Stores.....	714
Theaters.....	84
Warehouses.....	179
Burned, etc.....	512
<i>Machinery, Proposals and Supplies Wanted.</i>	
.....	1,721
.....	13,296

The Machinery, Proposals and Supplies Wanted list includes 59 foreign wants, representing the countries of Canada, Cuba, Mexico, Argentina, Bolivia, Venezuela, Honduras, England, Holland, Spain, Germany, Italy, Russia, Japan, Turkey, India and Egypt.

A recent review in our columns of these published statements revealed the fact that within the first two months of the year we noted hundreds of indus-

trial and building projects, with capitalization varying from a quarter of a million to more than a million dollars. Included in these were viaduct and bridge construction, coal developments, irrigation and drainage work, cement plants, power-plant construction, development of oil and gas properties, iron and steel, foundry and metal working; mining progression, colonization and other land propositions, railroad shops, municipal and county improvements, including water-works, sewers, roads and paving. In the list there are also many buildings erected by Government, State, municipal or private owners.

The foregoing, though, includes but a modest proportion of the great number of widely-diverse enterprises which were recorded by the Construction Department in the *Daily Bulletin* and weekly by the MANUFACTURERS RECORD during those two months and in the following month of March. Not all of these enterprises are of such great magnitude as those above mentioned. Thousands are of more modest proportions in regard to capitalization and consequent results expected. But all alike show confidence and progress. And, speaking of progress, it is significant to note that while the entire number of items published in January aggregated a few less than 4000, the February list went above that number, and the record for March shows more than 5000 items.

Such progressiveness is indeed interesting and significant when into consideration is taken the variety, extent and general value of the projects which, from beginning to completion, we endeavor to present to the great world of people concerned—the manufacturers and dealers, engineers and builders, investors and inventors—all those whose interests are subserved by such knowledge. As a subscriber to the MANUFACTURERS RECORD recently assured us, "It is worth while for people in our business to look carefully over every page of it." And many pages are required for the presentation of the Construction Department work, covering, as it does, all available information concerning the vast improvements and new industrial projects now going on and contemplated in the South, such as the great road improvements, development of the cement industry, installation of immense water-works and sewerage systems and other municipal betterments; drainage and irrigation of large tracts of land, thereby opening up fresh sections for homes, farming, fruit-growing, etc.; establishing of sugar refineries, lumber mills, various woodworking factories and turpentine plants; factories for the manufacture of new mechanical devices, together with many other upbuilding enterprises along industrial, building and general business lines. These we have noted in their various progressive stages, in many instances giving several notices to one new project or betterment.

We continue to note the destruction by fire of plants and important structures, since these are usually reconstructed, while new or rebuilt machinery for the plant is necessitated.

The 1721 items of the Machinery, Proposals and Supplies Wanted columns have called for definite and specific information and prices on a large and varied enumeration of machines, proposal bids and supplies. A number of these have come from foreign readers and subscribers. That these published requests are efficient is often announced to us in such positive language as that

used by a correspondent of a few days since, who wrote: "I have never yet failed to get anything I wanted in my line through your most valuable journal."

AMERICAN MINERAL PRODUCTS.

Mineral products of the United States in 1909, included among them being some primary manufactures such as pig-iron and articles made of clay, had an aggregate value of \$1,885,925,187, an increase of \$778,893,795, or 70 per cent., over the value \$1,107,031,392 in 1900. While the 1909 value was an increase of something more than \$290,000,000 over that of 1908, it was still \$185,000,000 less than the record total, \$2,071,607,964 of 1907 and \$18,000,000 less than the 1906 total, \$1,904,007,034. Comparison of products in 1900 and 1909 is made in the following table:

Mineral.....	1909.....	1900.....
Coal.....	\$554,902,624	\$296,688,164
Pig iron.....	419,175,000	259,944,000
Clay products.....	166,321,213	96,212,345
Copper.....	142,083,711	98,494,039
Petroleum.....	128,248,783	78,989,313
Gold.....	99,673,400	79,171,000
Stone.....	71,345,199	36,970,777
Natural gas.....	63,206,941	23,698,674
Cement.....	52,797,973	13,283,581
Lead.....	30,460,168	23,561,688
Silver.....	28,455,200	35,741,100
Zinc.....	24,864,300	10,654,196
Sand, etc.....	17,173,615	.....
Lime.....	13,786,269	6,797,499
Phosphate rock.....	10,772,120	5,359,248
Salt.....	8,243,831	6,944,603
Mineral waters.....	6,894,134	6,245,172
Aluminum.....	6,535,000	1,920,000
Zinc oxide.....	6,156,755	3,667,219
Cypsum.....	5,906,738	1,627,293
Slate.....	5,441,418	4,240,466
Sulphur.....	4,432,066	88,169
Mineral paints.....	2,419,710	644,089
Asphalt.....	1,938,273	415,958
Borax.....	1,534,365	1,018,251
Antimony.....	1,231,019	.....
Glass sand.....	1,163,375	.....
Sand-lime brick.....	1,150,580	.....
Pyrite.....	1,028,157	749,301
Quicksilver.....	888,719	1,302,586
Talc, soapstone.....	802,002	383,543
Antimony.....	802,002	383,543
Grindstones.....	804,051	710,023
Bauxite.....	679,447	89,676
Tungsten ores.....	614,370	11,049
Precious stones.....	574,380	233,170
Feldspar.....	491,788	189,971
Talc, fibrous.....	359,957	499,509
Graphite.....	345,509	197,579
Fuller's earth.....	301,694	67,535
Fluorspar.....	291,747	94,309
Mica.....	280,529	147,969
Quartz.....	249,466	86,251
Manganiferous ores.....	215,925	.....
Gilstones, etc.....	214,019	174,487
Barytes.....	188,561	188,089
Peat.....	174,289	.....
Tripoli, etc.....	122,348	24,207
Garnet.....	102,315	123,475
Bromine.....	92,735	180,790
Thorium, etc.....	65,282	48,805
Asbestos.....	62,603	16,310
Arsenic oxide.....	52,946	.....
Marble.....	45,653	20,000
Abrasive quartz.....	37,899	19,323
Micasite.....	35,433	32,858
Pumice.....	31,439	.....
Mangan. ores.....	19,675	104,289
Corundum, etc.....	18,185	102,715
Platinum.....	15,950	2,500
Cobalt oxide.....	.....	11,648
Rutile, etc.....	10,000	1,300
Chromic ore.....	8,200	1,000
Tin.....	4,832	.....
Nickel.....	3,000,000	1,000,000
Unspecified.....	300,000	1,000,000
Total.....	\$1,885,925,187	\$1,107,031,392

It is interesting to note that the combined values of coal, pig-iron, clay products and petroleum equal nearly 75 per cent. of the total value of all mineral products in 1909; that the value of gold is \$42,000,000 less than the value of copper and only \$28,000,000 greater than the value of stone, and that the value of cement is \$24,000,000 greater than the value of silver. Suggestive of certain industrial developments, based upon the mining industry, are the increases between 1900 and 1909 in the value of clay products from \$96,212,345 to \$166,321,213, or by \$70,108,868, equal to 72 per cent.; in petroleum from \$78,989,313 to \$128,248,783, or by \$52,259,470, equal to 68 per cent.; in natural gas from \$23,698,674 to \$63,206,941, or by \$39,508,267, equal to 166 per cent.; in cement from \$13,283,581 to \$52,797,973, or by \$39,514,392, equal to 297 per cent.; in phosphate rock from \$5,359,248 to \$10,772,120, or by \$5,412,872, equal to 101 per cent.; in zinc from \$10,654,196 to \$24,864,300, or by \$14,210,104, equal

to 133 per cent.; and in sulphur from \$88,100 to \$4,432,066.

Value figures are not, however, an absolute index to the volume of mineral production. For instance, the \$554,902,624 for coal in 1909 is the value of 452,118,506 tons of the bituminous and anthracite product, an average of \$1.22 a ton, while the \$306,688,164 in 1900 was the value of 263,537,465 tons, averaging \$1.17. The 1909 value of pig-iron, \$419,175,000, represented 25,795,471 tons, an average of \$16.25 a ton, while the \$259,944,000 in 1900 were the value of 13,789,242 tons, an average of \$18.85 a ton. The value of iron-ore increased between 1900 and 1909 from \$66,590,504 to \$110,290,596, or by about 66 per cent., although production increased from 27,553,161 tons to 51,294,271 tons, or by nearly 87 per cent. In 1907, the record year as to the value of mineral production, coal averaged \$1.30 a ton, iron-ore \$2.55 a ton and pig-iron \$20.55 a ton. The financial disturbances of the winter of 1907-1908 were still strongly manifest in the mineral production values of 1909, and in no respect, perhaps, more notably than in the decrease between 1907 and 1909 in the average value of a ton of pig-iron from \$20.55 to \$16.25. At present other influences than those of the depression of three years ago are reflected in more or less halting in the mineral industry, and it may be expected that there will be ups and downs in the years to come. But, there must be a steady general increase in the total value of mineral products, and it is probable that, even though there may not be at once a marked increase in price, there will be, under the spur of intelligent application of the theories of practical conservation, increasing profits in the main for mineral producers.

SOUTHERN CITIES' FACTORIES.

According to preliminary figures of the Census Bureau, the capital invested in factories at Pensacola, Fla., not including steam laundries, increased between 1904 and 1909 from \$2,147,000 to \$2,164,000, or by 1 per cent., and the value of products from \$1,937,000 to \$1,963,000, or by 1 per cent. Through the number of establishments increased from 39 to 60, the number of salaried officials and clerks increased from 120 to 122, while the average number of wage-earners employed decreased from 1206 to 961.

In the five-year period there was an increase in capital in factories at Key West from \$1,512,000 to \$1,911,000, or 26 per cent., though there was a decrease in the value of products, traced to the cigar and cigarette industry, from \$4,254,000 to \$3,965,000, or 7 per cent. The number of salaried officials and clerks decreased from 218 to 190, and of the average of wage-earners from 2406 to 2431.

At Tampa there were noteworthy increases in every item, the capital increasing from \$6,011,000 to \$11,610,000, or 93 per cent.; the value of products from \$11,264,000 to \$17,653,000, or 57 per cent.; salaried officials and clerks from 531 to 724, and average number of wage-earners from 5831 to 8996.

Between 1904 and 1909 capital invested in factories in Cumberland, Md., decreased from \$4,139,000 to \$4,095,000 and the value of products from \$4,505,000 to \$4,524,000. In the same period the capital invested in factories at Hagerstown, Md., increased from \$2,194,000 to \$2,970,000 and the value of products from \$3,027,000 to \$3,197,000.

Kansas City, Mo., increased its capital in factories from \$32,127,000 to \$42,729,000, and the value of products from \$35,573,000 to \$54,705,000. There was an increase in the average number of wage-earners from 11,039 to 14,643, and in the number of establishments from 612 to 902.

At St. Joseph, Mo., the capital in factories increased from \$9,734,000 to \$12,038,000, and the value of products from \$11,574,000 to \$17,626,000. The number of establishments increased from 219 to 261, and the average number of wage-earners from 4063 to 5389.

TEXAS.

No better record of the rapid making of Texas history can be had than the annual publication of the Texas Almanac and State Industrial Guide, issued by the Galveston-Dallas News. The 1911 edition, which carries with it a detailed railroad and county map, with brief descriptions of the 245 counties of the State, contains, in addition to a mass of facts dealing with government, special chapters on education, transportation and commerce, factories, public domain, natural and geographic conditions, drainage and irrigation, agricultural resources, horticultural achievements, live-stock breeding, immigration, fish and oyster industry, etc., written by experts in their respective fields. These chapters deal not with glittering generalities, but with definite statements as to the many resources of Texas with which prospective inspectors and homeseekers would naturally wish to be acquainted. It is a splendid guide to the largest State in the Union.

CANADIAN MINERALS.

Mineral production in Canada in 1910 reached a total value of \$105,040,958, of which \$49,169,826 represented metallic products and \$55,871,132 non-metallic products. The values by products were: Silver, \$17,106,604; nickel, \$11,181,310; gold, \$10,224,910; clay products, \$7,600,000; copper, \$7,200,463; cement, \$6,414,315; stone, \$3,499,772; pig-iron, \$1,651,321; natural gas, \$1,312,614; lead, \$1,237,032; lime, \$1,131,407; gypsum, \$939,838; salt, \$409,624; petroleum, \$388,550, and miscellaneous, \$2,445,890.

THE COTTON MOVEMENT.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight in the first seven months of the present season was 11,019,127 bales, an increase over the same period last season of 1,625,701 bales. The exports were 6,634,214 bales, an increase of 1,681,272 bales. The takings were, by Northern spinners, 1,761,595 bales, an increase of 19,247 bales; by Southern spinners, 1,065,037 bales, a decrease of 6759 bales.

FOR THE SOUTH.

In devoting practically all of the reading pages in its issue of April 6 to succinct but comprehensive messages from the Governors of Southern States, to inspiring comments by half a dozen representative editors of daily journalism in that section and to other articles bearing upon distinctive features of Southern material development, strikingly illustrated by groups of half-tone engravings, *Leslie's Weekly* of April 6 has made an important contribution to the prosperity of the South.

The Commercial Club of Okmulgee, Okla., John A. Belford, secretary, is circulating an artistic pamphlet illustrating residential, municipal and industrial activities in the city.

The annual meeting of the West Virginia Coal Mining Institute, which has a membership of about 500, will be held at White Sulphur Springs June 19 and 20.

Henry M. Flagler's Work in and for Florida.

[Editorial Correspondence Manufacturers Record.]

St. Augustine, Fla., March 31.

"The man who saw a wilderness and out of it created an empire; who saw a desert and out of it made a garden spot," might be said of Henry M. Flagler, one of the greatest developing geniuses of this or any other age.

A quarter of a century ago Mr. Flagler saw in the East Coast of Florida a country without transportation facilities and without material development of any kind. It was the most discredited part of the whole State in the estimation of the general public. He turned his attention to the building of a railroad to open up that region and to the construction of magnificent hotels in order to furnish an incentive to the traveling public to visit Florida. With unflinching faith, and despite the skepticism of even his closest friends, who regarded his investment of millions and tens of millions of dollars in the East Coast as the expenditure of a visionary enthusiasm, Mr. Flagler continued his work of development. Gathering around him men of ability in railroad and development work, he has given to the world an illustration of what energy and enterprise can accomplish. To the casual observer, the East Coast of Florida 25 years ago was probably one of the most uninviting development prospects in the whole South. Without transportation facilities except for a short line from Jacksonville to St. Augustine, and two short, disjointed pieces of road, the great stretch of country from Jacksonville to Key West, 500 miles in length, was without railroad facilities and without industrial or agricultural advancement. What Mr. Flagler has achieved in the creation of an empire is illustrative of the almost limitless possibilities, not alone of Florida, but of the whole South. The same energy, the same capital, the same far-seeing vision of a great leader who can bring things to pass as Mr. Flagler has done on the East Coast of Florida would duplicate his achievements throughout the South.

"The man who bets on the growth of the United States and keeps his debts paid will win financial success" is a statement made by Mr. Flagler when asked as to his views on the past and present business possibilities of the country.

"In the year in which I was born," added Mr. Flagler, "the United States had only 24 miles of railroad. Today it has nearly 240,000 miles. The marvelous expansion in railroad development during my lifetime, as indicated in these figures, is only typical of the vast expansion in every line of human activity. Wonderful, however, as has been the development of business and amazing as has been the growth of our country in the past, the future is destined to show a still more wonderful expansion. Instead of our country having attained unto the zenith of its material progress and prosperity, as some have assumed, we are only in the infancy of our growth. The possibilities of the future far exceed all that has been achieved.

"Never in human history has there been such a limitless scope for men of broad horizon, of energy and well-directed enterprise as there is today, and as the future will continue to open up to coming generations. For the individual man there is, I am sure, a broader field of activity, with greater opportunities for fame and for fortune than the past ever afforded to those who have achieved success. The limitless resources of our country awaiting development will furnish opportunities for profitable employment and for the creation of

wealth beyond the dreams even of the most far-seeing optimist of today.

"While the development of the whole country affords scope for capital and energy, I believe that the resources of the South in climate, soil and mineral advantages, and in geographical position for commerce, will enable this section to create greater business development and greater wealth than that of the entire country today. My own experience in the development of the East Coast of Florida is, I believe, typical of the possibilities of the South. Though I thought I had measured the probable growth of this section, its advancement has far exceeded my anticipations. Outside of the great rush into Oklahoma, some 17 or 18 years ago, and one or two similar movements of population in the history of our country, nothing like the present movement to Florida has ever been known in the United States.

"Two weeks ago the East Coast Railroad carried into the Fort Lauderdale section of Southern Florida over 3000 men from the North and West, who went there to select lands previously purchased from one of the land companies operating in that section. There were camped on the ground at one time nearly 3500 men, living in tents, arranging to secure their allotment under the purchase plan. My advice is that these men are of the most substantial character of Western and Northwestern farmers and business men. Another company has recently sold in tracts of 10 to 20 acres to Western people a body of 60,000 acres of land.

"The growth of the East Coast, which is developing much more rapidly than it has been possible to provide railroad facilities for, is indicated in the fact that on Sunday night last in a distance of 300 miles we had 32 loaded freight trains going in both directions, and last night we had on the line 180 carloads of miscellaneous merchandise from Jacksonville bound down the road to the Fort Pierce section. In order to meet this rapid growth of business we are now building 19 miles of sidings, and have placed an order for 25 heavy locomotives of the Pacific type. Were it not for the fact that I am now carrying out the building of 170 miles under contract to be completed not later than October, 1912, through the center of the State to the head of Lake Okeechobee, in addition to the Key West extension, I would immediately undertake the double-tracking of the entire system, which I am satisfied must be done within the next few years in order to meet the rapid expansion in traffic.

"The growth of business on the East Coast Line is indicated in the fact that during the first week of March the earnings exceeded the earnings of the corresponding week of last year by 36.18 per cent.; for the second week of March the increase over the corresponding period of last year was 43.16 per cent., and for the third week the gain was 40.38 per cent., and would have been much larger but for our inability to handle the traffic promptly. We now have at work on the extension to Key West over 1900 men, according to last week's payroll. Every steamer of the Mallory Line from New York to Key West brings us a number of men, but so great is the demand from the farmers for laborers that many of these men soon leave our construction camps for farm work, tempted by the higher prices that farmers are paying for laborers.

"I have never waived in my faith in the ultimate very great development of the section into which I was putting many

millions of dollars. I have always looked for great things, but the development now taking place far exceeds my anticipations.

"Since the work on the extension to Key West has been under way that section has been visited by several storms far worse than any of which there had been any record. In the hurricane of 1910 the wind attained a velocity of 120 miles per hour. These storms demonstrated that the concrete and bridge work had been constructed with such a margin of safety that it was not in the slightest affected, but it also demonstrated that some of the heavy fills at some points which engineers had thought would be adequate were not equal to meet such terrific hurricanes. We have therefore since the storms been carrying out all construction work on a basis to defy the winds and waves. This has necessitated trebling the amount of concrete and bridge work that we had first anticipated. As soon as the equipment used in the construction of the concrete and bridge work on that part of the road, sometimes known as the "over-the-sea" railroad, has been completed it will be moved to Key West and used in the construction of the terminal facilities to be established at that point.

"What has been accomplished in the development of the East Coast of Florida can be accomplished in other parts of this State, and to a very large extent throughout the whole South. Indeed, the growth of traffic is treading hard upon the heels of transportation facilities. It will require a vast expenditure of money to bring about an expansion of railroad facilities in the South equal to the demands of the next few years. But this cannot be accomplished if railroads are to be hampered by adverse State and Federal legislation.

"The next quarter of a century of material development belongs to the South. The movement of population to the East Coast of Florida, to which I have referred, is, I believe, an indication of a great Southward movement of population from the North and West. The growth of traffic, it seems to me, throughout the South, like the growth upon the East Coast Line, will demand an enormous expenditure in providing more sidings, more double track, reduced grades, less curves and more rolling stock.

"I would again emphasize my conviction that the progress of the coming years will very far exceed that of the last quarter of a century. This country has entered upon an era of boundless expansion in trade and commerce, and though business may at times have its temporary setbacks,

the future is destined to surpass what has been achieved in railroad expansion and business activity during my lifetime, as much as the progress of that period measured by a growth of railroads, from 24 miles to 240,000 miles, exceeds all that went before, but to accomplish this the railroads must be given an opportunity to make sufficient earnings to attract new capital, or else all railroad construction must depend upon the earnings of existing roads, a very slow way in which to expand railroad facilities."

Such are a few of the statements made by Mr. Flagler in discussing Florida, the South and the country at large. I believe it is safe to say that no other man has ever put as much of his own money into the creation of any one great railroad and country developing scheme as Mr. Flagler has put into his East Coast Railroad and the vast hotel and business operations connected therewith. This 500-mile railroad is an individual enterprise built by him with his own money, and the enormous hotels at St. Augustine, Ormond, Palm Beach and elsewhere built by him were also built with his own money. How many millions he has invested in Florida I do not know, but I have heard it estimated at over \$50,000,000, and by some at still higher figures. Here is a man over 80 years of age full of optimism, full of the joy of achievement, building that wonderful extension over the ocean along the Florida Keys to Key West and now taking up and letting to contract 170 miles of entirely new line to open up a section now without railroad facilities. No wonder the feeling of Florida people was voiced in a remark made to me a day or two ago by a man who said: "I wish Mr. Flagler could live a hundred years longer."

What other great constructive genius will come forward to do a similar work for the magnificent West Coast of Florida? What other men of equal creative powers will match his work in other sections of the South a thousand times more promising than was the East Coast of Florida when Mr. Flagler first began his work here?

RICHARD H. EDMONDS.

The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]
Birmingham, Ala., April 3.

Consumers of iron in the South have been taking advantage of every opportunity that has presented itself to secure iron for delivery over the remainder of the year on the \$11 schedule, realizing as they do that they cannot very well get hurt in buying ahead at such figures. This figure

represents but little if any margin of profit to the average run of furnaces, and it is not believed among the well-posted iron men of the district that such prices can prevail for a very much longer period. As a matter of fact, the asking prices now are pretty well 50 cents per ton higher on the part of all producers for last half. The \$11 figure is general now only for prompt shipment and second quarter, while \$11.25 for third quarter and \$11.50 for fourth quarter are about as good as buyers can do or hope to do this week. Very few sellers are inclined now to quote so far ahead. The consumption of pig in the South continues at a most satisfactory rate. Year by year the demand for iron products in the South proper is increasing, and the melt of pig-iron into finished forms shows up very well indeed for the South in comparison with other districts. Furnacemen here report little probability of an early increase in Alabama's pig-iron production, but it is worthy of note that never before in the history of iron in this State was more careful and scientific attention given to the preparation of the raw materials entering into pig-iron. The result has been that with these better-prepared materials, and with the latest mechanical appliances, the furnace stacks pretty well throughout the entire district are making records as to production, and at the same time with improvement in grades. On the recent visit of the blast-furnace committee of the Steel Corporation to this district, surprise was generally manifested on the part of the members who had not been here for some years at the improved conditions now prevailing in these respects.

There has been more or less trading recently in coal and ore lands in a small way, and it is understood that some good-sized transactions are now pending, with likelihood of being closed satisfactorily at an early date. Lands of this character are very scarce, and values are very much above figures of even five years ago.

The pipe manufacturers of Birmingham all report healthy conditions prevailing, with continued good demand and with some slight improvement being felt in prices. The output is reported as very satisfactory, while shipments have been very good on contracts taken during the winter months. Asking prices today are about as follows per net ton f. o. b. cars foundries this district: Four to six-inch, \$22; 8 to 12-inch, \$20.50 to \$21.50; over 12-inch, average \$20.

These figures are for water pipe only, whereas gaspipe takes a higher differential

of \$1 per ton. It is reported as being harder now to shade asking prices, even on large lettings, which is a most favorable indication.

The scrap market continues to present a dull and listless appearance. No trades of consequence were reported last week, and the market appears to have been left, altogether to take care of itself. Dealers' asking prices are about as follows per ton of 2240 pounds on board cars Birmingham:

Old iron axes, \$14 to \$14.50.
Old iron rails, \$12 to \$12.50.
Old steel axes, \$14 to \$14.50.
No. 1 railroad wrought, \$12 to \$12.50.
No. 2 railroad wrought, \$9 to \$9.50.
No. 1 country, \$7.50 to \$8.
No. 2 country, \$7 to \$7.50.
No. 1 machinery, \$9.50 to \$10.
No. 1 steel, \$10 to \$10.50.
Tram car wheels, \$9 to \$9.50.
Standard car wheels, \$12 to \$12.50.
Light cast and stove plate, \$8 to \$8.50.

As the time draws near for renewal of spring and summer steam coal contracts there comes a better feeling in the coal market. From April 1 to July 1 fully 75 per cent. of the coal contracts for 12 months ahead are placed; so it is only natural that keen interest centers in this line at present. The mines, however, are far from producing now at the rate at which the 1910 high record was made. Virginia cokes have been marked up 15 to 25 cents per ton in this district.

It is reported here that the plant of the North Birmingham Forge Co. will at once be converted into an agricultural implement manufacturing concern. This is but another evidence of the growth of the South in all respects, and at the same time is a reflection of the demand now being experienced for high-grade farm land in the South.

Mr. T. L. Powell, resident manager for the pig-iron firm of Hickman, Williams & Co., resigned to engage in the manufacture of pianos at Chicago. He is succeeded by Mr. L. E. Patton of the local office.

Steel Rail Orders.

[Special Dispatch to Manufacturers Record.]
New York, April 5.

Rail orders this week included: Carnegie Steel Co. sold 5353 tons to Sandy Valley & Elkhorn Railroad and 920 tons miscellaneous. Export sales through United States Steel Products Export Co., 4861 tons; Tennessee Coal, Iron & Railroad Co., 2140 tons; Illinois Steel Co. has orders for 10,002 tons.



DALTON ADDING MACHINE CO.'S PLANT AT POPLAR BLUFF, MO.

Building is two stories high, 45x250 feet; reinforced concrete fireproof construction; built entirely of concrete, including floors, walls, ceilings, roofs and staircase; output will be Dalton machines for adding, subtracting, multiplying, dividing, figuring interest, making out monthly statements, etc.; electric sign on top of building is 5 feet high and over 200 feet long; it is equipped with tungsten globes and flashes the words syllable by syllable; sign so arranged that the twelve night trains arriving at Iron Mountain passenger station nearby open a switch to light the sign and start it flashing; after trains have departed the sign stops flashing and light is extinguished; company's president is James L. Dalton of Poplar Bluff.

IN MINERAL AND FARM REGIONS.**To Build a Railroad 276 Miles Long in Texas.**

[Special Cor. Manufacturers Record.]

The Publicity League,

San Antonio, Tex., March 28.

That a railroad 276 miles in length will be built within the next year from San Antonio to the Rio Grande Valley is now assured. Some weeks ago the business men of this city, who have long recognized the worth of the country through which the road will pass, began the organization of a construction company with a capitalization of \$500,000 in actual cash. A public meeting was held at the Chamber of Commerce, in which the various interests of the city were represented. At this meeting a committee of 20, made up of the leading business men, to have charge of the organization of the construction company, was named as follows: George W. Brakenridge, William Cassin, Edwin Chamberlain, Fred W. Cook, Le Roy G. Denman, T. C. Frost, D. K. Furnish, A. H. Half, H. L. Half, F. L. Hilmyer, Otto Koehler, W. W. Lipscomb, Thomas B. Palfrey, J. H. Savage, J. D. Stevens, Ernest Stevens, W. B. Tuttle, George C. Vaughan, George W. West and Charles A. Zilker. Each of these is a business man of large affairs, and has been intimately associated with the wonderful progress of Southwest Texas. After these men had gone into the merits of the proposition in detail an active campaign was begun soliciting stock for the \$500,000 construction company. George W. West headed the list with a subscription of \$100,000, showing his implicit faith in the investment quality of the proposition.

The proposed route of the line is from this city south through Atascosa, Live Oak and Nueces counties, and then southward to the famous Rio Grande country. The section of country through which this line will pass is one of the most remarkable in Texas, and, in addition to being one of the greatest agricultural and fruit sections, is exceedingly rich in minerals. In a recent talk before a mass-meeting at the Chamber of Commerce, Professor Phillips, State geologist, and one of the famous men in his profession in this country, told of the mineral resources of the section. It contains lignite coal in abundance, and, according to Professor Phillips' statement, there is enough coal in the section through which the line will pass and contributory to it to last, if the consumption were ten times greater than it is today, 5000 years. The greatest natural gas belt so far discovered in Texas is directly on the route of this road, investigations showing that the pressure is as high as 600 pounds to the inch in some instances. Adjacent to this is an oil field in which development has already begun that promises even greater results than the world-famed "Spindle Top." A day or two ago drillers for oil in this new field near Pintas struck natural gas at a depth of 2800 feet with a pressure higher than has ever been discovered in any other gas field in Texas. The drillers experienced much difficulty in anchoring the flow.

Vast fields of kaolin, some of it as fine as has been discovered in the world, lie on both sides of this proposed road. That this is not an experiment, but is an actual fact, has been thoroughly tested, the product of these deposits having been sent to a number of famous potteries in this country, where is proved to be of that kind from which the finest china is manufactured. In proof of this, Professor Phillips in his address here told of a set of china ware he has in his home, decorated with scenes from Texas history, which has been pronounced as fine as any from the famous Haviland works in Europe. This kaolin

has the unusual quality of being fit for the manufacture of everything from the commonly used grades of pottery to the finest china.

On the bluff of the San Miguel River vast deposits of lignite coal, in some instances eight feet thick, crop out, and in one locality this has been burning for 25 years or more, having been set afire at some remote time either intentionally or by accident.

The fertility of the soil for agricultural purposes, while having been tested in many places by modern farmers, was known to the Indians, and when Cortez visited this part of the State he mentioned the fact in his report that he found many of the creek bottoms cultivated by the native inhabitants, sharp-pointed sticks being used for that purpose. In those days the Indians were growing corn, and a number of other vegetables which are now found on every farm. For years much of this country has been devoted to ranching, but the fertility of the soil and its adaptability to the growth of both vegetables and fruit have started a movement to break the great ranches into tracts devoted to agriculture as a means of greater profit and in obedience to those demands which are making Texas one of the greatest agricultural States in the Union. This road will tap the Rio Grande Valley, one of the agricultural belts of Texas where productions have been so large that in many instances they have started the agricultural world. In a period of three years since agricultural development began in this section, the tonnage in vegetables shipped out alone has amounted to thousands of cars annually, to say nothing of the cotton and forage crops. This land will make San Antonio the gateway to the market centers of the North and East for the productions of one of the most fertile valleys in the world. In addition to those things already named, the road will pass through one of the most rapidly developing citrus fruit belts on the continent—that portion of the country where orange trees in a number of instances have been bearing for 35 years. But owing to the distance and inconveniences of reaching market, citrus fruit culture has not been conducted on that broad scale that soil and climatic conditions warrant.

The financial end of building this road, in addition to the advantage that will accrue to San Antonio and to the country through which it is proposed to build, is an item of great importance to those who are taking stock in the construction company. It is pointed out by those in a position to know that, on account of the uniform level surface through which the road will pass, it can be built for approximately \$10,000 per mile. Within the entire distance only one large river, the Nueces, is to be bridged, and engineers who have made figures on this say this can be done for \$30,000. Already the landowners along the entire line who will be benefited have signified their intention to give in right of way, townsites and other bonuses enough to practically build the line. It is estimated by those thoroughly in touch with conditions that the contributions which will accrue to the line will aggregate at least \$1 per acre through a large part of the country for miles on either side of the road.

One thing connected with the promotion of this road about which those working for it are proudest is the fact that there is no promoter, and that not one cent of "promotion fee" is to be paid to anyone. Every person who has subscribed to this fund, it is declared, will share equally in the profits that are sure to come to those who have taken stock in the construction company. With the fund of the construction

company in hand and those things that will come to the company in the form of contributions to the effort from those who will be benefited will make the matter of bonding the line very attractive security to those seeking safe investments. One instance of this kind that is now attracting attention is that of the Houston & Texas Central Railroad, which is now disposing of lands given to insure the road's being built in retiring its bonds, selling enough land at increased valuation to liquidate this debt. Another instance is that of the Orient, which had promised to locate its shops at Fort Stockton. On the strength of this agreement land values increased so rapidly that Arthur Stillwell, president of the Orient road, sold enough lots to pay the expense of shop location and to build many miles of the road.

That this line will be built at an early date is emphasized by the fact that competent engineers have been secured, and the work of that department will be in full swing within the next 30 days. Taken as a beneficial effort for this city and the wide stretch of country directly south of this between here and the Rio Grande, no effort for the past 10 years has been so important, insuring, as it does, that San Antonio will be in the near future the great railroad center of the Southwest, with a contributory country very much larger than many States in the American Union.

TOM M. MORGAN,

Assistant Secretary.

OKLAHOMA CITY BUILDING.**Significant Improvements Made in Recent Months.**

[Special Cor. Manufacturers Record.]

Oklahoma City, Okla., March 20.

Among some of the larger and more prominent buildings completed here within the past few months might be mentioned the new city high school, costing \$500,000 and ranking as one of five of the most modern and model institutions of its kind in America; a magnificent Federal building, under course of construction; two of the finest hotels in the entire Southwestern country, one eight stories and the other ten stories in height, as well as a number of small modern hotel buildings, either completed or nearing completion; three magnificent church buildings, costing from \$100,000 to \$125,000, each in course of erection.

Residence building has kept pace with public and business building. Within the past 12 months hundreds of handsome structures and flats have been completed, many of them costing from \$10,000 to \$50,000 each. The winter season, having been a very mild one, has scarcely checked the building activities, and with the opening up of spring building permits are being issued at a rate almost equal to the most active period of "boom times."

In the wholesale district many new and fine buildings have been added during the past year, including several branches of big modern wholesale and manufacturing concerns. In the manufacturing district new plants are springing up, and there is a constant migration of industries that have outgrown their old quarters near the business center and are now moving to the outskirts in order to get larger sites to accommodate their increased operations.

The largest single concern now under construction is the packing plant of Sulzberger & Sons, costing \$3,000,000. This plant is the acme of perfection in modern packing-house construction. It is located adjacent to the Morris & Co. plant and the National Stockyards, and will be ready for operation in May.

Oklahoma City now has 196 manufacturing institutions in operation, employing approximately 5000 people, with a pay-

roll of \$350,000 per month and an output of something more than \$3,000,000 per month.

For the year 1911 the Oklahoma City Chamber of Commerce adopted as its chief slogan "More Factories." Working along this line, the first two months of the present year has shown excellent results. Several institutions have been secured, and some 25 or 30 more are now under consideration and are fully expected to locate here within the year. The work has but fairly begun.

While all of this has been going forward the matter of public improvements has not been neglected. In street building the city has been particularly active. There are now complete 123 miles of this paving, with enough under construction or contracted for to bring the total within the year up to more than 150 miles; a new City Hospital at number of fire stations, including a main central station and an entirely new fire-fighting equipment; water mains and sewers, equipping the new additions to the residence and manufacturing sections, and miles on miles of sidewalks. These improvements, together with the completion of a magnificent 28-mile boulevard encircling the city, stand to the credit of the public spirit of the people of this city.

The reader will perhaps get a better idea of the amount of business building accomplished during the past 12 or 15 months when I say that two miles of business frontage, including only buildings of two stories and more in height, have been erected. An idea of the business frontage values in the downtown district may be gained from the fact that Robinson street, the street described in the beginning of this article, is valued at about \$100 per inch, and this for a depth of only 50 feet. Eight years ago Robinson street was considered as the "ragged edge" of the business section, and the almost universal idea was that values on that street would never reach a very high figure. It is now the center of the business district, and is commonly referred to as the "Wall Street of the Southwest." No "boom" ever produced any such concrete, brick and marble results. The reason "why" might be grouped under two great heads:

First, geographical location in the center of a vast territory abounding in a wonderful variety of natural undeveloped resources, with railroad facilities which make this city the actual center of the great Southwest.

The next great reason—and of no less importance—is the character of the people of Oklahoma City; people working in harmony; labor and capital; brains and brawn co-operating to the one common end of building a great modern city; level-headed conservatism inspired by all the moral and financial daring of heroes in the time of war.

PAUL B. SMITH.

RAILWAYS AT TULSA.**Well Equipped as to Trunk and Local Steam and Trolley Lines.**

[Special Cor. Manufacturers Record.]

Tulsa, Okla., March 20.

It is an axiom that the surest indication of the prosperous future of any city is the number of railways entering its portals, their connections and the character of service rendered. With respect to these conditions there are few cities in the United States superior to Tulsa. Of trunk lines, having direct connection with all points north, south, east and west, she has the St. Louis & San Francisco, the Missouri, Kansas & Texas and the Atchison, Topeka & Santa Fe. Of local lines she has two, the Midland Valley and the Arkansas Valley & Western. The former has its inception at Fort Smith, Ark.,

with its present terminal at Arkansas City, Kans. Its mileage in operation is 313, with 55 miles under construction. When completed this will bring the road to a connection with the Union Pacific at McPherson, Kans. It is also in contemplation to extend the line from Fort Smith to some point on the Gulf, possibly Port Arthur, thus giving to the Southwest an additional transcontinental connection. The Midland Valley is an invaluable feeder to the manufacturing and mercantile interests of Tulsa. The line not only passes directly through the very heart of the Mid-Continent oil and gas field, but traverses one of the richest agricultural sections of Oklahoma. At Silverdale it taps the Missouri Pacific, thus practically giving Tulsa a fourth trunk line. Its other connections are: At Muskogee, with the Missouri, Kansas & Texas and the Missouri, Oklahoma & Gulf; at Bokashe, with the Fort Smith & Western; at Panama, with the Kansas City Southern; at Fort Smith, with the Iron Mountain, and at Arkansas City it again strikes the Atchison, Topeka & Santa Fe and the Missouri Pacific.

The Arkansas Valley & Western road, having its initial at Tulsa and its terminal at Avard, is 173 miles in length, traverses a rich agricultural and mineral country, and is a prime factor in the building up of Tulsa. At Enid the road ties Tulsa on to a fifth trunk line, the Rock Island.

In addition to the local lines named, the city has a belt line under construction, which will give her exceptional transfer facilities. She also has two trolley lines, covering 12 miles within the city, together with two suburbs, both under construction—the one to Sapulpa already in operation to Orcutt Park, three miles; the other, the Sand Springs, six miles, will be completed about the first of June. The Sapulpa line will be completed early in 1912. The two roads when complete will cover approximately 30 miles.

Some idea of the magnitude of Tulsa as a railroad center can be gained by a knowledge of the fact that over the three trunk and two local lines 58 trains arrive and depart each day. The equipment of all these lines are first-class in every respect, while their schedules could not be more conveniently arranged for the accommodation of the people of Tulsa and the traveling public. All of the lines, save

the Midland Valley and the Atchison, Topeka & Santa Fe, have modern depots. At present the Atchison, Topeka & Santa Fe and Midland occupy the same station, and, to say the least, it is not in any sense a credible structure. Inasmuch, however, as the Santa Fe is negotiating for a full block of ground contiguous to its present terminal, it can safely be figured that possibly within the next 12 months a first-class modern depot will take the place of the old one, to be occupied by the two roads. The location of the several lines are so favorable that unquestionably in a few years Tulsa will be able to boast of the finest union station of any city in the Southwest.

F. M. POSEGATE.

BACK HOME TO THE SOUTH.

Intent and Scope of the Movement for Immigration.

[Special Cor. Manufacturers Record.]

Johnson City, Tenn., April 3.

Starting as the basis for a publicity campaign for the Carolina, Clinchfield & Ohio Railway, the "Back Home" movement has grown since last August. Being bound by no stereotyped formulae or precedent, the industrial department of the Clinchfield searched deeply into the moving impulses and sentiments of men as determining where they seek to live. It was early recognized that homeseeking persons are influenced by fanciful as often as by material, logical considerations. This fact is clearly seen in the movement of people to the Western and Northwestern States, and by the tone and character of literature which draw them thither. The advertising men of the Western railroads have long depended upon the lure of glitter, color and more or less nimble dealing with facts to attract people West. In addition they have continuously "worked" the newspapers of the South with their press matter, which is cunningly written as news, but is always "spiked" with advertising of the West—just a faint touch, perhaps, but enough to keep public attention.

He reads but sketchily who does not now glimpse the designs of the "Back Home" movement. Early in the action it was scented out that a real counter-play against the game of the advertising men of the West, railroad, State and municipal, must be effected by calling into it all the newspapers, boards of trade, railroads and

other agencies in the Southern States which are sending out people. First, as against the "Call of the West," which appeals to love of novelty and adventure, was put forward the "Back Home" appeal which is stronger and more lasting. The former catches young men and those with the nomadic spirit; the latter seizes upon those who have tired of rambling and wearied of unfulfilled promises and the dreary isolation in many parts of the West and Northwest. Second, the movement was, confessedly, given such direction as would obtain space in the newspapers of the North, West and Northwest. This has been accomplished. Third, the Southern press has been brought en rapport for the purpose of offsetting, as far as possible, the advertising of the Western railroads; to reach their Western subscribers and to "ginger" the Southern railroads to the point of more extended advertising. Fourth, the movement was designed to enlist the people themselves in the work of immigration and to apply the factor of personal influence to bringing more people into the South. In this, pointers were taken from the West, where every inhabitant is an immigration agent. By this it was hoped the public and the railroads of the South would, by working together, come into closer and better relations.

Now for the results: The "Back Home" call is doing its work. Answering, men are coming back to the South. They are writing of conditions in the West, hitherto sedulously avoided by the Western railroads, and their letters are being published broadcast in the South. They are busying themselves spreading the "Back Home" call—in advertising the South. Again, the people are offering—many of them are using personal efforts to bring in desirable new people. They are obtaining the addresses of hundreds—even thousands—of former Southerners for the use of commercial organizations and the railroads of the South. In short, the "Back Home" movement is doing all it started out to do, except to win the active support of all the railroads. Some of them, indeed, like the Norfolk & Western, Nashville, Chattanooga & St. Louis, Queen & Crescent, the New Orleans, Mobile & Chicago and Carolina & Northwestern, are co-operating in the movement, but the Clinchfield is persistently asking all South-

ern lines to come in. Its position is, "More people in any section of the South, more business in all parts of the South," and everybody wants more business. An industrial man of one of the Southern railroads said recently: "We think the 'Back Home' movement is good, but we want to know what the Clinchfield has got 'up its sleeve.'" He was answered that it was not playing a game with the railroads and people of the South, but with the railroads and land-boomers of the West. The officers of the Clinchfield think it should be apparent that, as it has but a limited amount of territory to be developed along its 245 miles of line, but comparatively few could find homes therein, but that it is to its advantage that contiguous territory—the whole Southeast, in fact—be more densely populated. While it is in business for itself, and although it expects a full return for all its outlay, the time of its press agent and all, yet it is realized that to counteract the "Call to the West," to push the South into the "vast and middle" of the tide of emigration, all possible means must be employed; that the most effective of these is the "human interest" and personal factor phase of the "Back Home" movement.

W. D. ROBERTS.

Wants Agents in the South.

The MANUFACTURERS RECORD is advised that a certain New York firm is seeking to engage representatives in the South. This firm is marketing a lock-woven steel fabric that is offered as a reinforcing fabric of high elastic limit, providing continuous bond. The stock is made 56 inches wide, 330 feet long, and shipped in rolls. Applicants for agencies are invited to address "Steel Fabric," care MANUFACTURERS RECORD, and the letters will be forwarded.

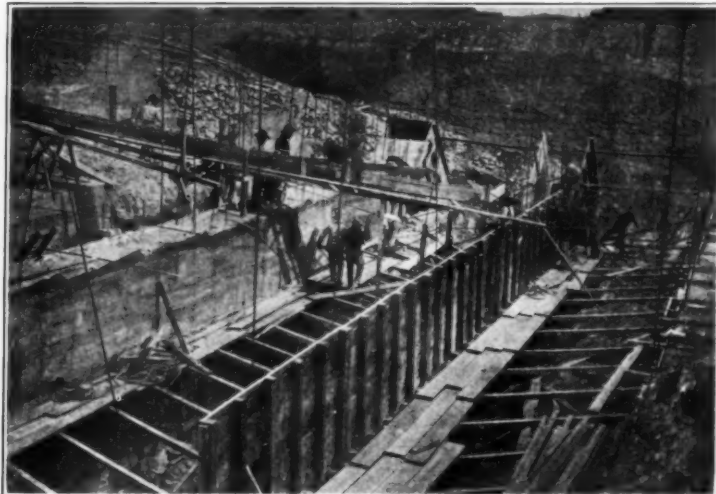
Of Interest to Architects.

Dr. H. O. Walter of Newport, Ark., writes the MANUFACTURERS RECORD that he wants to correspond with an architect who makes a specialty of school buildings.

The Norfolk Society of Architects has been organized with Messrs. F. F. Ferguson, president; William N. Diehl, vice-president, and Thomas T. Thompson, secretary.



CONSTRUCTING ST. STEPHEN COMPANY'S DAM.



CONSTRUCTING ST. STEPHEN COMPANY'S DAM.

The St. Stephen Irrigation Dam.

The St. Stephen Land & Irrigation Co. of Marfa, Tex., is proceeding with the construction of its dam, previously reported by the MANUFACTURERS RECORD. Herewith are two photographs of construction on this dam. Referring to it, Sanford J. Truman, secretary of the company,

writes as follows: "The dam will be of the Ambursen type, 104 feet high above bedrock, 992 feet long, with 62 feet buttresses set 16 feet apart. The entire dam and face wall will be built of reinforced concrete. The face wall will have an inclination of 45 degrees, and will be 42 inches thick at bedrock and 18 inches at the crest of the dam.

"We are building this across the Alamo Creek, 11 miles due south of Marfa, the county-seat of Presidio county, Texas. Our reservoir will cover about 1120 acres of water, and will hold 60,000 acre feet. From two main canals which will be built on each side of our property we will be able to put under by gravitation 9000 acres of our land. The Kansas City, Mex-

ico & Orient Railroad will run through our valley a distance of 11 miles, and we are now within 11 miles of the main line of the Southern Pacific Railroad, between New Orleans and Los Angeles."

Rees Turpin is the company's president, with offices in the New York Life Building at Kansas City.

SUPPLY AND MACHINERY MEN.

Joint Convention of Three Associations in Louisville.

[Special Dispatch to Manufacturers Record.]
Louisville, Ky., April 4.

The triple joint convention of the Southern Supply and Machinery Dealers' Association, the National Supply and Machinery Dealers' Association and the American Supply and Machinery Manufacturers' Association was called to order Monday at the Seelbach Hotel, Louisville, by S. P. Browning, Maysville, Ky., president of the American Association. After the invocation by Dr. Edward L. Powell, Governor Willson made the address of welcome on behalf of the State. In his remarks the Governor commended the plan of the joint meeting, saying that to counsel, plan, study and work out the problems incident to business would work out the greatest good to the greatest number of people and businesses.

In the absence of Mayor Head, Mr. Pendleton Beckley of the Board of Public Service extended the welcome on behalf of the city in an address of peculiar merit.

For the business men of the city of Louisville, Mr. William Heyburn, president of the Belknap Hardware Co., greeted the delegates in a speech that was followed closely. He criticised in part the operations of the Sherman anti-trust law, and expressed the hope that in some way at some time it would be possible to enact legislation that would legalize business associations.

The responses to the welcoming addresses were made by Edward C. Hinman of the American Steam Pump Co., Battle Creek, Mich.; W. M. Pattison of the W. M. Pattison Supply Co., Cleveland, O., and by H. C. Clark of the Charlotte Supply Co., Charlotte, N. C.

Following the formal proceedings, general discussion was had. John Trix of the American Injector Co., Detroit, Mich., related some interesting observations concerning a South American trip he had just completed, in which he spoke feelingly of the benefits to be derived from the operation of the Panama Canal, with a side-light as to the absolute integrity with which it is being constructed. He said that in his 30-days' trip he had not seen the American flag floating on any ship, and came out strongly advocating a ship subsidy by Congress.

Mr. George Puchta of Cincinnati, speaking to the question of the business outlook, declared he was an optimist of the pronounced type, and stated unequivocally that conditions were good and the outlook splendid, basing his opinion on crop conditions and the general business feeling.

In the afternoon the executive committee of the American Supply and Machinery Manufacturers' Association held a meeting, at which time the work of the past year was carefully reviewed, and as far as possible the coming year's work was discussed in anticipation. One point in particular was dwelt upon, having reference to the possibility of continuing the triple joint meetings. It was determined, in the judgment of this body, that similar meetings were desirable because of the saving in time and expense, where all three associations could come together, as contrasted with separate meetings.

"From reports received, last year was a much better one than most of us had experienced in the last three years. We suffered fewer declines and received some advances, which, with larger profits secured and fewer bad debts charged off, made us more optimistic for the future. The consensus of opinion is that 1911 will be better than 1910." This is the opinion of Secretary Smith of the Southern Sup-

ply and Machinery Dealers' Association, contained in his annual report read before the association. It was learned from it that the membership had increased 25 per cent. during the year, the majority of new members having been secured through the personal efforts of President Clark. The report presented such topics as cast-iron and malleable fittings, cash discounts and freight rates. The subject of one-cent letter postage was dwelt upon at some length, and a campaign of education was suggested to secure this rate. Speaking of the Panama Canal, the report said there was every reason to believe that its opening would mean an era of new and greater prosperity for the South, particularly the Gulf States; that the great bulk of South and Central American freight passing through the canal would likely go through the Gulf ports of Florida, Alabama, Louisiana and Texas, and that the South should dominate this trade, and probably will. Parcels post was termed a calamity, and the report closed with a strong plea for organization and co-operation of business men, quoting the practice of the German and Japanese Governments. Reports of president, treasurer and committees; discussion of topics in the program as printed in the MANUFACTURERS RECORD last week; routine business, and the appointment of a nominating committee completed Monday's and Tuesday's work.

The National Supply and Machinery Dealers' Association spent Monday and Tuesday with their annual reports and routine business. They, too, discussed one-cent letter postage, and, in the absence of Mr. McIntosh, the subject was presented by the advisory secretary-treasurer, T. James Fernley.

The American Supply and Machinery Dealers' Association followed its program of reports of officers and committees. The report of the secretary-treasurer showed increases in both resources and membership of 25 per cent. A nominating committee, comprising four former presidents of the association, was appointed by President Browning. A topic that was discussed earnestly was that of employers' liability and employees' compensation. The practice in Germany and some State laws were mentioned. Decisive action at this time was not possible, but strong expression was made of the desirability of an employees' compensation enactment by sane legislation. Coupled with this was the opinion that any organization or association that was formed would be most practical where the individual employees were interested.

Approximately 350 members of the three associations and their ladies and guests have been registered. The business sessions are well attended. Outside the meeting-rooms the business talk is cheerful. The local committees have done well. All seem satisfied. A. C. BOUGHTON.

FOR LOUISIANA IRRIGATION.

Representative Citizens to Witness Inauguration of a Great Plant.

Representative citizens of Louisiana and a large party of Pennsylvanians will witness on April 8 the placing in commission of the first pump of the plant at Washington, La., of the Union Irrigation Co. This project, which is to have wide-reaching effects in Southwest Louisiana, is the culmination of the plans which Mr. J. Franklin Schell has pushed for more than 10 years in the face of many difficulties. About \$2,000,000 has been invested in the project, which is designed to irrigate ultimately between 500,000 and 1,000,000 acres, and the first pump, one of five, will supply water sufficient to irrigate at least 15,000 acres. More than 50 cars were required to bring the machinery to the site

of the pumping plant, which is capable of lifting a stream of water six feet in diameter a height of 75 feet from Bayou Catawba. All the buildings have been constructed with reference to enlargements in the future, the necessity for which is forecast in the fact that the plant is situated at the highest point in the prairie district of Southwest Louisiana, making it easy for the water to be distributed by gravity, as the irrigating canals and laterals are extended, even to the point of meeting the wants of quite a million acres of land.

The completion of the plant will assure agriculturists in that section of a supply of water at all seasons, and it is fully expected that, in addition to rice-growing, the cultivation of corn, cotton, cane, vegetables and other farm products will be expanded, as the soil is a fine silt, so free from grit that horses are seldom shod in that region. It is wonderfully fertile soil, and the initial inauguration of irrigation this week will be influential in furthering the full development of that section.

Portland Cement Plant Enlargement.

Details of the Atlantic & Gulf Portland Cement Co.'s plant enlargements at Ragland, Ala., are stated to the MANUFACTURERS RECORD by Clarence N. Wiley, that company's chief chemist. He writes in part as follows: "The entire cost of enlargements will be close to \$125,000, and will make possible a regular daily output of 2400 barrels. The stone storage (capacity 5000 tons of crushed limestone) will be equipped with belt conveyors, making all handling from crusher to scale bins mechanical. This stone storage will be in use in a few weeks. The clinker storage will have a present capacity of 50,000 barrels, and is so arranged that a 25,000-barrel extension can be constructed at little expense. A Jeffrey pan conveyor will be used for carrying hot clinker from kilns to storage. A belt conveyor in tunnel under storage will carry seasoned clinker from storage to mill bins, provision being made en route for weighing and adding gypsum. The new machinery consists of two rotary kilns, 125 feet long and 9 feet in diameter, and three installations of five grinding units. Each of these consists of two Allis-Chalmers pulverizers, Newage screen and Allis-Chalmers tube mill equipped with cylinder improvement. This equipment will be used for pulverizing clinker. The Fuller Lehigh mills used for this purpose will be placed in the raw grinding department. A large portion of new machinery is on the ground and being set up. The baghouse, 40x70 feet, will be equipped for handling 15,000 bags per day. Its construction will be steel and concrete, the walls being of plaster on expanded metal lathing to conform with surrounding mill buildings. The laboratory building, 30x45 feet, will be two stories, basement being devoted to physical testing and second floor used for chemical laboratory. Basement will be half under ground, so that a more uniform temperature can be attained in all seasons. Up to first floor the walls will be of concrete; both floors of concrete. Floor of chemical laboratory will be reinforced and supported on concrete beams. A matched wood floor will be laid on top of this. Remaining walls will be constructed by nailing inch boards diagonally to studding, affixing expanded metal lathing on both sides and plastering. This building will be absolutely fireproof, and will contain many original forms of equipment. A number of five-room cottages will be built, to conform in design to those already erected. All of these improvements should be completed by September 1. All contracts for building have been let, as also have all orders for new machinery."

Big Sums for Streets.

An instance of the extent to which money is being invested for street improvements by Southern cities is seen in a statement included in the annual report of the city engineer of Galveston. This statement applies to the fiscal year ending February 28, and shows that during that year over \$331,000 was expended for various street improvements, including \$24,000 for vitrified brick pavement, \$53,000 for mudshell surfacing and labor, \$186,000 for grade raising and filling, \$49,500 for routine work and maintenance.

Oklahoma City has been actively engaged in street improvements during recent months, and a statement of contracts awarded since January 1 shows that more than \$500,000 worth of paving has been arranged for. These figures are in the city engineer's estimate, and about 15 miles of additional work is proposed for 1911, at a cost of about \$50,000 per mile, which amounts to \$750,000. This will make the total work for the year amount to \$1,250,000. These two cities are but instances of the great improvements going forward on the streets of Southern cities. Details of all work are presented from week to week in the Construction Department (see "Road and Street Work") of the MANUFACTURERS RECORD.

Providence Oil & Gas Co.

Referring to plans of his company for developing its properties, Frank Nelson, Jr., president of the Providence Oil & Gas Co., Birmingham, writes as follows:

"Our present capital stock is \$1,000,000. A stockholders' meeting has been called for the 11th of this month with a view to increasing the capital stock to \$1,250,000.

"This company controls about 60,000 acres in the Fayette gas belt, and has in operation three producing wells with a flow of about 6,000,000 feet per day. We are now under contract for the boring of four additional wells, and will probably let a contract in the next 30 days for five more.

"Gas is at present being piped from the producing wells to the town of Fayette, about two miles distant. Fayette is a small town of 10,000 or 15,000 people. Until the extent of the field is shown, which can be done in no way other than drilling, no arrangements will be made to pipe the gas in large quantities.

"After the gas has been thoroughly proven, if it is extensive enough, we expect to pipe the gas to Birmingham, a distance of 65 miles; to Columbus, Miss., 40 miles, and to Tuscaloosa, 30 miles.

"The gas is a very high quality, and the field thus far looks promising."

Natural Gas at Petrolia.

[Special Cor. Manufacturers Record.]

Fort Worth, Tex., March 31.

At Petrolia, about three miles from Henrietta, Tex., and only a few miles from the center of the great oil district in Clay county, the Texas Company, the Gufey Company and other oil companies are actively in the field, and 28 wells have been brought in. Eleven of them are fine gas wells. One company is furnishing Fort Worth with gas through 16-inch pipe. Many million feet of gas are being lost, and the timber land in that section is dying from the gases in the air.

Representatives of the State and other interests connected with the reclamation of the Florida Everglades are considering the advisability of caring for the construction of secondary canals to be cut through the rivers on the east side of the Everglades directly into the ocean, without waiting for the completion of the main canal.

Congress of Technology.

The sessions of the Congress of Technology, with which the Massachusetts Institute of Technology will celebrate the semi-centennial of the granting of its charter, will be opened in Huntington Hall, Boston, on Monday afternoon, April 10, with an address by President MacLaurin of the Institute, and will continue through April 11, when a large number of papers will be presented by distinguished alumni and members of the faculty of the Institute at sessions in the forenoon and in the afternoon, held in the various buildings of the Institute. These second-day sessions will be open to the public.

The papers to be presented before the Congress will constitute, taken together, a somewhat remarkable record of the achievements of applied science within the last 50 years, and this record will be at the same time in large part a record of the work of men trained at the Institute.

Half a century ago there were many forces at work to impress on farseeing men the necessity of radical changes in education in order that the country might profit as it should by the discoveries of science and by the application of its method and spirit to the great practical problems of the day. Following the plan laid down for it, the Institute has trained a number of men who are now in the very front rank of science, men who have extended far the boundaries of knowledge and thereby gained a world-wide fame. In addition to this its former students are to be found in positions of power and responsibility in every State of the Union, engaged in the work of developing mines, opening up the country by means of railroads, applying scientific methods to the great problems of transportation, power production and distribution, advancing chemical industries, conserving the public health and contributing in countless other ways to the increase of the nation's wealth.

This practical application of science to the affairs of life will be surveyed and described, as also the conditions and problems of groups of allied industries, in a large number of papers by alumni and members of the faculty of the Institute. The record of the proceedings of the Congress will furnish an epitome of what has been done by the application of technical science to the world's business.

The papers will cover such general subjects as architecture, business administration, economics, public health and factory sanitation, industrial organization and training, power production and distribution, materials and manufacturing processes, reclamation of arid lands. The subject of scientific management will be presented from many points of view, as it may affect railroads, and various manufacturing industries.

Cotton Rates Agreement.

[Greenville (S. C.) News.]

According to a statement made last night by Mr. Lewis W. Parker, the fight between the cotton manufacturers and the railroads for a more convenient schedule of rates on cotton-piece goods between interior points and Charleston has been practically settled.

Mr. Parker's statement in effect is that a settlement has been reached between the mill men and the railroads on two questions. One is the through rate between South Carolina points and New York, and the agreement on this making 45 cents per hundred a maximum rate for cotton-piece goods. It is stipulated that when the rate exceeds 45 cents it is to be reduced to 45.

The other question is that of the use of Charleston as a port. In order to facilitate this use it is agreed that on ship-

ments of goods on all through rates a proviso for stoppage in transit will be made, enabling goods to be stored in Charleston and distributed from there without extra charge. This is a right similar to the concentration privileges, which has now been extended to cotton-piece goods as far as regards shipments to Charleston.

It is also stated that this settlement will probably lead to the building of warehouses for storing and distributing cotton-piece goods in Charleston.

The agreement between the roads and the mill men practically puts to an end the matter before the Railroad Commission, the decision to reopen the case and the injunction to prevent same.

The case has aroused considerable attention throughout the State, and in other States cotton manufacturers have watched its progress with much interest. The matter was first brought before the Railroad Commission during the fall of 1910, a petition being signed by a large number of mills throughout the State asking a reduction on the rate between interior points and Charleston in order to allow that port to be a storing and distributing center for manufactured products. The hearing was held, interrupted by the death of Commissioner Sullivan, and then resumed. During December of last year the commission ordered practically the rates requested by the cotton manufacturers. The order was to take effect during the early part of March, but just a few days before it was to take effect a petition from the railroads was granted by the commission, allowing a rehearing on the grounds of Mr. Sullivan's death.

Subsequent to this an injunction was issued at the request of the mill men holding up the order for a reopening of the matter, and requesting the commission to show cause why they should not be permanently enjoined from reopening the question. That injunction is still pending, the date set for the hearing not having arrived. The agreement which has been reached between the railroads and the cotton manufacturers brings the question to a close, and it is doubtful whether the hearing on the injunction will be held, except possibly as a formality.

Gray & Dudley Hardware Co.

In order to develop its general business, and particularly to increase its manufacturing departments, the Gray & Dudley Hardware Co. of Nashville has increased its capital stock to \$1,000,000, and has a surplus fund of \$250,000. This company now owns and operates three large factories at Nashville, consisting of two stove

and range foundries and one saddlery and harness factory. It has issued no bonds, and is enjoying the greatest prosperity in its history, so the MANUFACTURERS RECORD is advised by John M. Gray, Jr., first vice-president of the company.

American Undercurrent Co.

The American Undercurrent Co. of Pittsburg, H. L. Lambert, vice-president, Pennsboro, W. Va., is planning to build a manufacturing plant and town to be called Lamberton. Referring to the enterprise, Mr. Lambert writes to the MANUFACTURERS RECORD in part as follows:

"Lamberton will be located about one mile from Ellenboro and about four miles from Pennsboro, on the main line of the Baltimore & Ohio Railroad. It will be an up-to-date town. We will have paved streets from the beginning. All sewers, gas and water lines will be laid on the alleys instead of the streets, so there will be no tearing up of the pavement in repairing lines at any time. There will be no frame buildings on the main business streets, as all buildings must be built of concrete, brick or stone. On the residence streets the dwellings will be all set back a certain distance from the street.

"The first electric line in the county will be erected on Main street of Lamberton. It will also be the first town to have street cars propelled by the American undercurrent system. On the opposite side of the railroad from the town will be located the American Undercurrent Co.'s manufacturing plant, which will cover about 15 acres of ground, the supposed cost of which will be several hundred thousand dollars. The exact cost has not yet been determined at this time. It is supposed that when our factory is in full blast it will employ at least 1000 men."

Bald Mountain Cement Plant.

The MANUFACTURERS RECORD has further advice regarding the Bald Mountain Portland Cement Co., mentioned last week as incorporated with a capital stock of \$1,000,000 to build near Aragon, Ga. J. L. Bass of Rome, Ga., one of the incorporators, states the company's principal office is at Rome, and that it expects to organize within 20 days to erect a plant for a daily capacity of 1000 barrels of Portland cement, this output to be increased to 5000 barrels in the future. Mr. Bass further writes:

"Bald Mountain is about 14 miles south of Rome and about six miles from Rockmart.

"The analyses of both the limestone and shale make up an extraordinarily good cement proposition. The quantity is prac-

tically inexhaustible, promising a supply for the manufacture of 5000 barrels of cement per day, without intermission, for probably 1000 years.

"However, nothing is being done just at this time, except that the advertisement for the charter is running and legal representatives are working on the title to the lands, which consist of more than 300 acres."

De Loach Manufacturing Co.

The De Loach Manufacturing Co. has fully organized, with offices in the Candier Building, Atlanta, Ga. Its capitalization is \$250,000, and its officers are: President, A. A. De Loach; vice-president and secretary, J. K. De Loach; treasurer, V. J. Adams. Its directors are Messrs. De Loach and Adams, H. H. Whitcomb, C. P. Byrd, H. M. Dorsey, F. P. Kern, S. R. Jacobs, E. E. Lowe, A. G. De Loach, J. T. Kimbrough and D. Wurtzburger. This company's foundation for its plant will be the established line of De Loach mill machinery, with the addition of the tractor truck department. It will use the patents of J. K. and A. A. De Loach on mill machinery and transmission for motor vehicles as a basis for a country roads tractor truck or all around utility wagon for any and all kinds of service in the country and on the farm. Mr. A. A. De Loach states that T. H. Martin and others of the best engineers in the country, as well as 49 motor-truck manufacturers who are using friction transmission, have endorsed his company's plans.

Merger Company Obtains Charter.

The Alabama Consolidated Coal, Iron & Steel Co. has been chartered with a nominal capital of \$1000, which it is proposed to increase to \$30,000,000, divided into \$10,000,000 preferred stock and \$20,000,000 common stock. This company has for its purpose the consolidation of the Alabama Consolidated Coal & Iron Co. of Birmingham and the Southern Iron & Steel Co. of Gadsden, which contemplated merger has been heretofore referred to by the MANUFACTURERS RECORD. No official announcement of details has appeared, but it is understood that the arrangements are progressing. Joseph H. Hoadley, 165 Broadway, New York, is president of the Alabama Consolidated Coal & Iron Co.

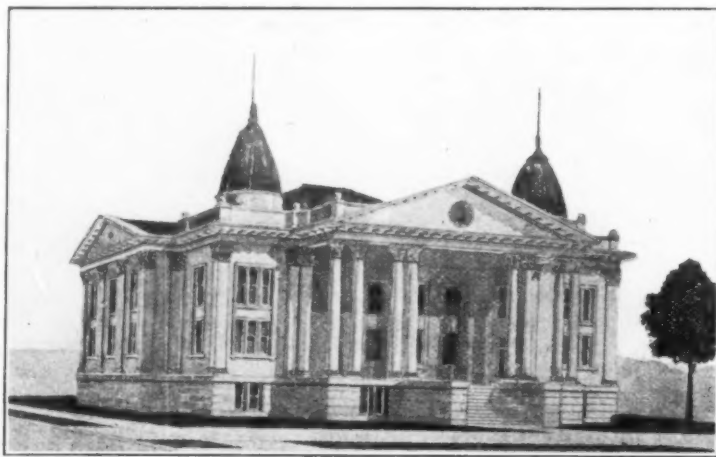
A \$100,000 Rice Mill.

The MANUFACTURERS RECORD is advised that a \$100,000 company will be organized to build a rice mill at Memphis, Tenn. This plant will be equipped for milling 5000 bushels of rice every 24 hours. It will comprise a four-story 44x48-foot mill building, a one-story 64x128-foot warehouse, a one and two-story 100x200-foot warehouse, all constructed of corrugated iron, and a brick boiler and engine house. In operation the mill will employ from 25 to 40 men. J. S. Warren will be manager.

The Old Dominion Mining Co., 80 Wall street, New York, is proceeding steadily with the development of its lead and zinc properties near Joplin, Mo. It is now actively working a 20-acre tract, on which considerable modern machinery has been installed, including a plant of six hand-jigs to temporarily treat the ore until the ground is opened up sufficiently to justify the erection of a mill. These installations will be completed this month, and other developments are under consideration.

A colony of Hungarians is to be settled upon a tract of land 15 miles from Tampa, Fla., to engage in the cultivation of the guttapercha plant.

It is reported that great beds of phosphate exist near Fredericksburg, Tex.



FIRST PRESBYTERIAN CHURCH AT HILLSBORO, TEXAS.

Building illustrated is to be erected; 72x60 feet; concrete columns; brown pressed brick, with concrete foundation; basement for Sunday-school; electric lighting; steam heating; modern seating; pipe organ; asphalt roof; now considering bids on construction, seating and pipe organ; architects, Galbreth Bros. of Oklahoma City; chairman of building committee, L. J. Thompson.

INDUSTRIES WANTED BY SOUTHERN COMMUNITIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS RECORD accepts no paid matter in its reading pages. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

This department is open only to news facts of interest to investors, homeseekers and manufacturers. Communications of 200 or 300 words are likely to be given prompter publicity than more extended ones.

FITZGERALD'S PROGRESS.

American State Bank,
Fitzgerald, Ga., March 25.

Editor Manufacturers Record:

The marvelous record achieved by this city is the wonder of the State. The town was not on the map 15 years ago; it is now a city of 8000 inhabitants (including adjacent suburbs). It has all modern improvements and a class of citizens that are highly progressive and imbued with the spirit of civic pride. It is the best laid-out city in the State; has an ideal climate, and the farm lands surrounding it are noted for their fertility and productiveness.

All the staple crops are raised here to a degree of perfection. Pecan culture has become very popular, and there are wide areas of pecan trees all around us. The enhancement in value of real estate, both city and suburban, has been truly wonderful the past 10 years, and will be even more so in the future. To illustrate with facts regarding our remarkable growth, we will give you a list of improvements now going on: \$40,000 theater, H. A. Burkhardt; \$3500 brick store building, two stories, F. J. Hansen; \$3000 two-story brick building, storehouse, Oliver Graham; \$3000 brick store building, G. W. Rogers; \$5000 two-story brick store building, A. B. C. Dorminey; \$4000 brick stables, Whitehead & Perry; \$8000 block of seven brick stores, one story, Arch Griffin; \$2000 improvement in Phillips Block; \$10,000 brick building, two-story stores and dwelling overhead, by Seanor & Roush; \$25,000 Baptist church to be built this year, money already subscribed; Consolidated Grocery Co. has recently erected a \$25,000 warehouse; Ben Hill Company, a \$5000 warehouse; Gray Bros., a \$4000 warehouse, and J. L. Dorminey has made \$8000 improvements in hotel, adding a number of rooms.

Among the residences completed within the past few months are: John Justice, a \$6000 frame residence, two stories; Mrs. Pauline Crawley, a \$7000 two-story frame residence; Mrs. T. L. Griner, residence at a cost of \$3500, two story frame; Col. C. B. Teal, \$2000 Mexican bungalow; J. L. McCarty, \$3500 bungalow; B. T. Strickland, \$2500 bungalow; W. R. Paulk, \$6000 residence; Judge E. Wall, \$4000 residence; J. H. Mayes, \$4000 residence. Fitzgerald completed a few months ago an elegant passenger depot built by the A. B. & A. at a cost of \$35,000.

The banks of Fitzgerald are in a most prosperous condition. The First National Bank, only 11 years old, shows a capital of \$125,000 and surplus and profits of \$80,000, deposits \$200,000; the Exchange National Bank, capital \$100,000, surplus and profits \$85,000, deposits \$400,000; Third National Bank, the youngest of the three national banks, being but four years old, capital of \$50,000, surplus and profits of \$11,000 and deposits over \$100,000.

The American State Bank, the only State bank in the city, was organized last fall, has had a remarkable record in the matter of new depositors, averaging a little over three new accounts a day for each working day this year, a record that would be difficult to surpass. Its capital is \$50,000 and deposits are \$25,000. Never before have the banks in Fitzgerald enjoyed a more prosperous season than now.

We need more manufacturers down here, and invite correspondence on the subject. This is an ideal location for any kind of manufacturing enterprise, being the center of population for South Middle Georgia. Come to Fitzgerald if you want to be happy.

P. F. CLARK,
Vice-President.

WELL-FIXED LONGVIEW.

Chamber of Commerce,
Longview, Tex., March 28.

Editor Manufacturers Record:

Longview, an industrial and railroad center of East Texas, has a population of nearly 8000, and is rapidly growing. Industrially, Longview has a big plow factory, two railroad roundhouses and shops and a big box factory, besides many other industries of equal importance.

The Citizens' National Bank has just completed a new \$50,000 bank building, two stories, which is a credit to any city many times the size of Longview. The First National Bank has just let a contract for the erection of a new bank building, four stories, which, when completed, will be the pride of the banking circle of East Texas; work will begin on this building April 1. Herman Yates has just about completed two new modern business houses, same being leased before he laid the first brick. Several additional business houses will be constructed in this city in the near future.

The city of Longview will vote a bond issue April 11 for the purpose of paying all of our business streets, buying the sewerage system and erecting fancy electric post lights, about 30 to 40 feet apart, on each side of the streets in our business district. The bond issue will carry by a majority of at least 4 to 1.

Hundreds of men and teams are rushing the work on our new railroad, Port Bolivar & Iron Ore Railway, that will connect Longview with the famous ore fields of East Texas, 30 miles north. The road is to be completed by July 1, 1911.

Longview is the county-seat of Gregg county. Gregg county is one of the best little counties in the State. It has not a penny of indebtedness, and has over \$15,000 in the treasury. The climate is ideal, and fruit growing, truck farming and stock raising are the principal industries. Gregg county's tax rate is 52½ cents on the \$100 assessed valuation. The county has a permanent school fund of \$172,713.

LUTHER ELLISON,
Secretary.

SWEETWATER HIGHWAYS.

Sweetwater, Tex., March 28.

Editor Manufacturers Record:

On the 24th inst. the City Council of Sweetwater awarded the contract to A. J. Roy of this city for macadam and asphalt paving on 14 blocks on and adjoining the City Square. This work will begin in the next 30 days, and will be rapidly pushed to completion.

In a recent election precinct No. 1 of Nolan county, Texas, voted an issue of \$100,000 road improvement bonds to be

used in improving the roads in and around Sweetwater. This issue of bonds has been sold to Ulin & Co. of Chicago at par, and all the proceeds will be spent on roads in a radius of five miles of the city. The roads will all be built up of macadam, and when finished will be second to none in all the Southwest.

Sweetwater's first packing plant is almost completed, and the cold-storage machinery is being installed now. The plant will be ready for operation in a short time. Work will begin on the Glasgow-Davis packing plant in a few days, and it will be ready for operation, it is thought, in six months.

BEN ANTHONY.

MEBANE IMPROVEMENTS.

Mebane, N. C., March 23.

Editor Manufacturers Record:

The coming summer will be quite a busy one for the town of Mebane, as there will be \$15,000 spent on sidewalks and other improvements.

The Mebane Bedding Co. is now at work on quite a large addition to its factory.

The White Furniture Co. has been very busy for the past 12 months working a large force of hands, its work including a very fine grade of solid mahogany furniture for the United States Government.

The Mebane Iron Bed Co. reports a very satisfactory business, and is making some improvements.

Mr. R. H. Tyson, Mr. W. Y. Malone, Mr. Arthur White and others are planning to build nice homes.

The Mebane tobacco market has been very successful. We have only one warehouse, and have sold practically a million pounds of tobacco this season. Steps are being made to build another warehouse.

Mr. W. A. Murry has purchased the Eaton farm, which is on the edge of town. He expects to divide this up in small farms and lots.

Miss Mattie Johnston has about completed an addition to the Johnston House, one of our hotels, and expects to install an up-to-date water system.

The Continental Chair Manufacturing Co. has been formed to build an addition to its finishing-room.

S. A. WHITE.

THREE-CENT NATURAL GAS.

Poteau, Okla., March 25.

Editor Manufacturers Record:

Your journal has been very comprehensive in its report on the industrial development of the South, and we presume you are interested in any kind of new development that is being done.

Leflore county, Oklahoma, is being established as a natural-gas center for the east side of the State, Poteau, the county-seat, being the point from which operations are being carried on at this time.

The first gas was discovered by parties drilling for oil in July, 1910, three and a half miles east of Poteau. Since that time drilling has been done in different directions from this well, at this time there being six wells under way. Parties from Pittsburg, Pa., have contracted for the drilling of 15 wells in the vicinity of the first well drilled in. No oil has been discovered so far. The work is being pushed rapidly for the new wells, and gas at three cents per thousand feet is being offered now by the company which owns the plant in the town of Poteau.

TOM WALL.

YOUNG, BUT DESIROUS.

Board of Trade,
Taft, Fla., April 1.

Editor Manufacturers Record:

The town of Taft, Orange county, on the Atlantic Coast Line, is less than two years old, has good school, hotels, saw, shingle

and lath mill, planing mill and novelty works and electric-light plant; is surrounded by fertile lands adapted to fruit culture, trucking and general farming and stock-growing.

The Board of Trade of 80 members is active and progressive.

Taft will be incorporated at an early date.

We want box, crate, basket and barrel factory, a wood-alcohol distillery; in fact, any factory to use pine and cypress timber. Factory sites will be given the right people, and other substantial aid.

Homeseekers and investors will find here many advantages. A letter to the secretary of the Taft Board of Trade for particulars will receive prompt attention.

W. L. VAN DUZER,
Secretary.

BOX FACTORY FOR BEAUMONT.

Beaumont, Tex., March 27.

Editor Manufacturers Record:

The Beaumont Chamber of Commerce is vigorously promoting the establishment of a large box factory at Beaumont, the idea being to utilize short length lumber from the many sawmills in the Beaumont country and tupelo gum timber, which grows so abundantly throughout the Sabine and Neches River basins. It is stated that countless millions of feet of this timber can be bought for almost nothing, and that Beaumont is an ideal assembling point for it. There are 118 sawmills within 100 miles of Beaumont. These mills cut yellow pine lumber, and the daily capacity aggregates 7,500,000 feet of lumber. There is a vast amount of short length lumber and culls in this cut, and it can be bought cheap enough to enable a box factory to handle it with profit. It is understood that Tupelo gum is becoming very popular as a box-making material, and there is certainly an abundance of this material in the Beaumont country. The new industries committee of the Chamber of Commerce expresses confidence that local capital can be interested in the project if an experienced manufacturer can be found who will take financial interest in the company. An excellent site on the river front and with railroad facilities is available for the purpose.

ASHERTON'S GROWTH.

Asherton, Tex., March 22.

Editor Manufacturers Record:

This is the present terminal of the Asherton & Gulf Railway. As superintendent of buildings I came here in March, 1909, to erect for Mr. Asher Richardson, president of the railway company, a station, general offices, a bungalow and several cottages. Since then I have been busy putting up for him buildings ranging from a few hundred dollars in cost to \$30,000 for his own residence, to be completed within 30 days. The surrounding country where 20 months ago not a bush had been cut is now dotted with farms, and it is said that a train of 30 cars will be necessary to bring the crates this spring in which to ship Bermuda onions from the 700 acres planted in them in this immediate vicinity. There are here already well supplied lumber yards, hardware stores, dry goods stores and groceries, hotels, etc. I understand, though that is not authoritative, there is a prospect of the railway being extended 30 miles to the San Pedro ranch of 30,000 acres, belonging to Mr. Richardson.

JOSEPH E. HAYNES.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 96 and 97, and under "Cities, Towns and Railroads Inviting Factories" on pages 140, 141, 142 and 143.

GOOD ROADS

Vital Questions Dependent Upon Good Roads.

[Editorial Correspondence Manufacturers Record.]

Jacksonville, Fla., April 1.

The question of good roads is not simply one of almost supreme economic value, but it is at the same time of vital importance from the religious and educational standpoint. Some years ago I heard the president of a great religious convention in the South in his annual address say to 3000 or 4000 delegates and visitors to whom he was speaking that it was their duty to work with untiring energy to secure the building of good roads. "It is," he said, "vain to hope to build up the churches of the country districts to their highest point of efficiency so long as impassable roads make church attendance practically impossible for a large part of the year." The more I have thought over the emphasis which he laid upon the building of good roads as a part of the religious duty of every man to whom he was speaking, the more deeply I have been impressed with the significance of his statements.

It may be said that bad roads mean the non-development to the fullest extent of religious and educational activities; they mean loneliness on the farm, and loneliness which is one of the impelling forces driving people from country to city life. It is not possible to retain upon the farm either the young people or the more active laborers so much needed in farm work so long as bad roads make easy transportation back and forth an impossibility. While I cannot vouch for its accuracy, it has often been claimed that the loneliness of country life results in more insanity among farmers' wives in proportion to the total number than is to be found in any other class of people. Whether this oft-repeated statement be correct or not, I can readily imagine that there may be some truth in it. The men on the farm are able to move around, to meet each other at the country store or to engage in outside pursuits which furnish some diversion. The farmer's wife in a country of bad roads has little or no diversion. It is almost impossible during a large part of the year for her to visit friends or to attend church, and no wonder the monotony of a life, where bad roads produce these results, hangs like a pall over her. Outside of the influence of bad roads against educational and religious development, and outside of the adverse influence of bad roads through intensifying the loneliness of country life, the loss to farmers as to all others using roads is in the aggregate staggering. We complain bitterly against the railroads for freight charges, and yet put up with a cost of hauling over bad roads so many times greater than the cost of railroad freights per mile that we can but be amazed at our own failure to utilize our opportunities. Every wheel that turns over a bad road adds to the cost of living and doing business; every farmer is daily paying a toll through the heavy burden of bad roads which in the aggregate cost is far more than his taxation, both State and national. In fact, as an economic problem pure and simple, the question of good roads is of more vital concern to the American people than the question of protection or free trade. There is no other economic problem before the country of such supreme importance for the people of all classes and all sections as that of good roads. While bad roads mean undeveloped educational and religious activities, continued loneliness of country life, lack of prosperity on

the farms as compared with what there might be, and many other disadvantages, good roads, on the other hand, mean the highest educational and religious advancement, a more general prosperity of all classes, the elimination of the loneliness of country life and the keeping at home of tens of thousands of people who, without good roads, will continue to crowd to the cities, often to their own disadvantage and to the disadvantage of the cities. Well-rounded national development can only come through the highest development of the agricultural districts, and this can only come through the highest development of all religious and educational activities and social possibilities. The country must be made as attractive through good roads and the blessings which they bring as the city, or otherwise we shall have a continuation of the tremendous drain from the country to the city, which has been one of the dominant features of our national growth during the last quarter of a century.

I believe it may be said without question that, broadly speaking, the building of good roads through any settled district does not in reality cost the county, State or individual a single dollar. This is due to the fact that the construction of improved highways immediately results in enhancement in the values of all adjacent properties by reason, so far as the farming districts are concerned, of the higher profits which come through reduced cost in cultivating and shipping all products. A striking illustration of this was recently given when one of the leading citizens of Delaware made an offer to that State to build a highway through the entire State at a cost of \$2,000,000, and not to be reimbursed except through the increased income of the counties and the State from the larger values created by the construction of the road. So confident was he—and the whole history of the building of good roads proves the correctness of his position that there would come enhanced values by reason of greater profits to those living along the line—that he was willing to stake \$2,000,000 and thus show his faith by his works.

Throughout the entire world there has come an awakening to the importance of building good roads. It is true that in most European countries there are magnificent highways on which hundreds of millions of dollars have been expended, but even in those countries renewed attention is being given to the betterment of existing roads. The South has been tremendously handicapped by its bad roads. The need of increased railroad facilities in the South is so great that it can scarcely be overstated, and yet vitally important as are enlarged railroad facilities, they are not so important as improved highways.

The South is annually losing millions of dollars through the higher cost of hauling over bad roads. This could be saved by the construction of good roads. The men who, like the president of the great religious convention to whom I have referred, are preaching throughout the South the gospel of good roads are doing much for humanity. Their work is of far-reaching importance. No one can be too enthusiastic on this subject; no one can make a mistake in concentrating his work for the betterment of his country upon the building of good roads.

The growth of the automobile industry

has tremendously added to the necessity for good roads. If the automobile should be considered only as a plaything of the well-to-do, it would still be a factor in National upbuilding of far-reaching importance, but the motor car is more than a toy or luxury of the hundreds of thousands who are daily using them in city and in country. If the interest aroused by motorists to the need of good roads should bring about their general construction, the amount of money, vast as it is, which has been expended in the buying and running of motor cars would be counted from a National viewpoint a very wise investment. The annual loss from bad roads is greater than the cost of operating all the motor cars that are owned in America. But the automobile is not simply a pleasure vehicle; it is an expression or exponent of a new power which has come into the world for the betterment of mankind, the advancement of civilization and the enormous expansion of National progress and prosperity. The motor car means that mechanical power for transportation for business and pleasure and in various agricultural pursuits is to take the place of muscle power. About three quarters of a century ago, when the first locomotive built in the United States for an American railroad was constructed for a Southern road, the far-seeing people of that day named it "The Best Friend." They realized that mechanical power as typified in the locomotive and the railroad marked a new era in human affairs, a mighty step in the advancement of civilization. Today the little gasoline engine which runs the motor car and the motor truck, which pumps the water for all farm uses from that of supplying the house to that of irrigating purposes, might be called "The Best Friend." The motor car is merely one of the influences at work to bring this new power with all its influence for good into universal play. The motor car thus becomes a tremendous influence in the creation of a universal sentiment for good roads, and at the same time stimulates the mechanical genius of the rising generation, quickens the inventive faculties of thousands of young men and brings to the agricultural interests of the country new possibilities undreamed of a few years ago.

R. H. E.

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Easton, Md.—City will issue \$35,000 of bonds for street improvements.

Granger, Tex.—Justice Precinct No. 2 of Williamson county voted issuance of \$100,000 of bonds for road construction.

Lockhart, Tex.—Caldwell County Road Precinct voted \$50,000 of bonds for road construction.

Memphis, Tex.—Hall County Precinct No. 1 voted issuance of \$25,000 of bonds for road construction.

Bonds to Be Voted.

Brooksville, Fla.—Town will vote April 25 on \$7000 bond issue for paving streets and \$2000 bond issue for constructing sidewalks.

Liberty, Tex.—Liberty County Commissioners will probably order election for May 16 to vote on issuing \$250,000 of bonds for road improvements.

Longview, Tex.—City will vote April 11 on issuing bonds to pave streets in business section.

Sanford, N. C.—Lee county will vote on issuing \$100,000 of bonds for road improvements.

St. Petersburg, Fla.—City will vote

May 9 on issuing \$5000 of bonds for construction of crosswalks.

West Palm Beach, Fla.—City will vote April 25 on issuing \$9000 of bonds for street improvements.

Contracts Awarded.

Bowling Green, Ky.—Southside Realty Co. awarded contract for constructing 14,000 square feet of concrete sidewalks.

Chase City, Va.—City awarded contract for macadamizing two streets.

Coke County, Tenn.—County awarded contract for surfacing, grading and macadamizing 25 miles of roads.

Dallas, Tex.—City awarded various contracts for paving, totaling about \$74,000.

Denton, Md.—Talbot and Caroline counties awarded contract at about \$20,000 for grading and macadamizing road and constructing 70-foot steel drawbridge.

Dresden, Tenn.—Weakley county awarded contracts for constructing roads in 22 county districts.

Farmville, Va.—City awarded contract for paving to cost about \$14,300.

Fort Worth, Tex.—City Park Board awarded contract for one mile of concrete sidewalk.

Knox County, Tenn.—County awarded contract for completing grade work on 25 miles of county roads.

Louisville, Ky.—City awarded various contracts for constructing vitrified-block streets and alleys.

Memphis, Tenn.—City awarded contracts for \$48,000 worth of street improvements.

Nashville, Ga.—Berrien county awarded contract for construction of graded road.

Norfolk, Va.—American Boulevard Corporation awarded contracts for granolithic sidewalks and grading.

Sweetwater, Tex.—City awarded contracts for 14 blocks of macadam asphalt paving.

Texas City, Tex.—Galveston county awarded contract at about \$17,410 for grading, regrading, mud-shell paving, culvert building, etc., on 4½ miles of road.

Contracts to Be Awarded.

Austin, Tex.—City receives bids until April 15 for paving, estimated to cost \$100,000.

Fairfax, Va.—Fairfax County Good-Roads Association plans rebuilding 20 miles of road at a cost of about \$100,000.

Greenville, Tex.—City receives bids until April 11 for constructing 148,600 square yards of paving and 84,000 linear feet of concrete curb.

Grenada, Miss.—City is inviting bids for constructing 75,000 to 150,000 feet of granolithic sidewalks.

Houston, Tex.—Bering Tire & Rubber Co. will construct two-mile speedway.

Linville, N. C.—Company has been incorporated to construct macadam 22 miles long.

Murphy, N. C.—Murphy township contemplates constructing 30 miles of macadam road.

Norfolk, Va.—City will construct cement concrete sidewalks to the extent of about 1100 square yards.

Oklahoma City, Okla.—City will receive bids until April 10 for grading, etc., on six avenues; receives bids until April 11 for constructing various sidewalks.

Pineville, Ky.—City will expend about \$25,000 for street improvements.

Ponca, Okla.—City will receive bids until April 5 for constructing three blocks of brick paving and eight blocks of macadam.

Williamson, W. Va.—City will receive bids until April 10 for about 16,000 yards of paving and about 11,000 linear feet of curbing.

Winnfield, La.—Winn parish contem-

plates road improvements, for which \$50,000 will be available.

BY CONVICT LABOR.

Building Splendid Highways in Georgia.

W. M. Gammon, Rome, Ga., chairman Board of Commissioners Roads and Revenue Floyd County, writes to the MANUFACTURERS RECORD:

"The road from Rome to Chattanooga will be a graded macadamized road, with concrete-steel bridges over all streams and concrete culverts over all drains. Through Floyd county it will be of the same class as that of the Government road through the Chickamauga Park to Lafayette in Walker county, with which this road will connect.

"The road will be built with convict labor. This county has two gangs of 50 convicts each, 60 mules, seven road graders, two traction engines, with teams of steel cars and road rollers. The bridges and culverts will be built by a bridge gang of trained convicts. These convicts have become really experts in this line and will construct the bridges at about one-half the contract price. In fact, we find the concrete culverts with this labor about the cheapest we can build—about \$3 per cubic yard. With this gang we have built over 30 miles of this class of roads the past 18 months, 30 concrete-steel bridges and 120 concrete culverts.

"If all the States would adopt the Georgia convict system, we would in a few years revolutionize road building in the South and have first-class roads from the Potomac to Mexico.

"Chattanooga county and Walker county will only have about 16 miles to build of this road, and they propose to connect with our road and the Government road at Lafayette.

"This county has already built two roads of this character from Rome to the Alabama line, and with the co-operation of the Alabama counties expect to continue them to Birmingham. This county will also complete this summer one road to Polk county and another to Bartow, and with the co-operation of the other counties to continue the roads to Atlanta.

"We expect in the near future to have a through line from Chattanooga to Birmingham and Atlanta, passing through Rome. We advocate putting all convicts on the roads, and when the people understand the great benefits to be derived from this work we will soon have a splendid highway from Washington through Virginia, Tennessee and Georgia to the Gulf Coast in Florida.

"With regards and an appreciation of the good work the MANUFACTURERS RECORD is doing in the upbuilding of the South," etc.

Blackwood Mines and Mills.

The Blackwood Coal & Coke Co., Blackwood, Va., is progressing with its mine and mill construction heretofore detailed. This is seen in a statement from Clarence J. Creveling, general superintendent, who writes as follows:

"We have purchased all of our machinery and equipment for the sawmill, mines, etc. Our present tippie capacity will be 1200 tons per day. This will be increased from time to time. The band-saw mill will saw approximately 30,000 feet per day, and our circular mills 20,000 feet per day."

The new steamship Somerset of the Merchants & Miners' Transportation Co., to be used in the Baltimore, Savannah & Jacksonville service, was launched last week at Camden, N. J. The vessel is 333 feet long, and has first-class accommodations for 120 passengers.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

OLIVER IN A BIG DEAL.

Salisbury, Spencer and Concord Plants Bought—Rumors That the Dukes Are Interested.

[Special Dispatch to Manufacturers Record.]

Salisbury, N. C., April 5.

W. J. Oliver and associates of Knoxville, Tenn., have purchased interest in Salisbury & Spencer Railway Co., and this company will immediately connect the street railways of Salisbury and Concord by building interurban railway 22 miles. The company now owns six and a half miles of electric railway, and electric-light and gas plants of Salisbury and Spencer, and is in splendid financial condition. This proposed interurban line will connect towns having 24 big cotton mills and various other manufacturing plants and general shops of Southern Railway at Spencer.

Proposed improvements will cost half million dollars. THOS. J. JEROME.

Another report says that associated with Mr. Oliver in the transaction are E. G. Oates, T. A. Wright and John M. Ball. W. F. Snider of Salisbury is president of the Salisbury-Spencer Railway, among others interested being T. H. Vanderford and T. J. Jerome. The latter company controls the various properties mentioned.

President Snider is quoted as saying that great improvements will be made, and that the railway from Salisbury to Concord will be built immediately. A meeting will be held by all the parties interested within the next two weeks for the perfection of plans to fulfil the work in contemplation. The railway in the town of Concord is to be operated at once, the cars for it, which are of the storage battery type, having been shipped by the builders.

In connection with this deal it is rumored that the Piedmont Traction Co. and the Piedmont & Northern Railroad Co. (in which J. B. and B. N. Duke are interested for the building of an electric interurban railway system in the Carolinas) are also concerned in the purchase made by Mr. Oliver. He is the contractor for the construction of about 90 miles of line on the big interurban in South Carolina, and there are reports that the company entertains ideas of extending it to many towns other than those which have heretofore been named. Nothing has, however, been officially admitted as yet to show that they are behind him. Salisbury is about 25 miles in a direct line northeast of Charlotte, which is the headquarters of the interurban company, and Concord is about midway, although not on a direct route. Dispatches say that Mr. Oliver acquired control by buying 51 per cent. of the stock of the Salisbury-Spencer Railway, although another report merely says that he secured a joint interest with the present owners.

Presumably Mr. Oliver's company will do the construction work on the line between Salisbury and Concord.

NEW OKLAHOMA RAILROAD.

Ex-Governor Haskell, Wm. Kenefick and Others Will Build to Reach the Missouri Pacific.

The Oklahoma City Railway Promotion Co. has been organized at Oklahoma City, Okla., by ex-Governor Haskell and others with the object of building a line from a point on the Missouri, Oklahoma & Gulf Railroad—either Henryetta or Weleetka, Okla.—via Oklahoma City, and thence northwest to the Kansas State line bound-

dary to finally connect with the Missouri Pacific in Kansas, altogether about 350 miles. William Kenefick of Kansas City, president of the Missouri, Oklahoma & Gulf, is said to be interested in the new company, which has organized with temporary officers thus: C. N. Haskell of Muskogee, president; O. D. Halsell, vice-president; J. H. Johnston, secretary and treasurer, the other directors being C. F. Colcord, A. H. Classen, E. K. Gaylord, R. A. Vose, E. D. Nims, O. P. Workman, E. F. Bisbee and George W. Risser. The line will be operated by steam, and is estimated to cost about \$10,000,000. Ex-Governor Haskell is reported as saying that if nothing interferes it can and will be built in from 12 to 15 months after the preliminary arrangements are made. It is said that it will be constructed by Messrs. Haskell, Kenefick and Risser, with the co-operation of a citizens' committee. Mr. Risser resides at Oklahoma City. The capital stock of the company is \$300,000, and about \$175,000 are reported already subscribed.

It is said that the right of way is practically decided upon, and that arrangements have been made to float bonds, these securities to be taken by a syndicate in Paris, France, of which Mr. Kenefick is a member, it having handled the bonds for the Missouri, Oklahoma & Gulf Railroad. It is not intended to cease operations after building the line immediately in prospect, but the promotion company will devote its attention then to the construction of other roads required out of Oklahoma City. It is said that the line from Henryetta will probably run via Shawnee to Oklahoma City, and thence northwest via Kingfisher and Woodward, Okla. It is anticipated that it will afford Oklahoma lower freight rates, and it will open up much new territory both east and west of Oklahoma City. Closer connection will be made to coal fields.

CHESAPEAKE & OHIO.

Expenditure of \$9,000,000 Expected for Betterments on Western Lines.

Concerning the new bond issue of the Chesapeake & Ohio Railway for \$125,000,000, it is reported in financial circles that \$30,000,000 are to be issued immediately after the stockholders approve the loan. Of the latter, \$21,000,000 will be used to take care of existing obligations, and the rest will be devoted to improving the western connecting lines of the system, the Hocking Valley, the Kanawha & Michigan and the Chicago, Cincinnati & Louisville, the latter being now known as the Chesapeake & Ohio Railway of Indiana. This will provide about \$9,000,000 for the latter purpose, and it is said that some double-tracking of the main line from Chicago east will be undertaken. Some expenditures for improvement of road have been already made on these properties, but more will have to be done to bring them up to the standard in order to make them as completely efficient as is desired.

As for the new mortgage in its entirety, an officer is reported as saying that about one-half of the total money secured from time to time by issues of bonds under it will be spent for acquisitions of new lines or their construction, and that the rest will be for improvements. This is taken to mean that the Chesapeake & Ohio intends to indefinitely continue its policy of expanding and bettering its properties.

Another official is quoted as saying that \$1,500,000 have already been appropriated for improvements on the Cincinnati division in Kentucky. This includes double-tracking that is under way, and it will close the gap of 40 miles existing in the double track between Huntington and Cincinnati.

There are some interesting rumors afloat

that Edwin Hawley, who controls the Chesapeake & Ohio, has his eyes on the Seaboard Air Line and the Carolina, Clinchfield & Ohio Railway, and would like to combine them with the C. & O. It goes without saying that if such a combination should be brought about at any time that the projected link to connect the Clinchfield road with the Chesapeake & Ohio between Dante, Va., and Elkhorn City, Ky., would not remain long uncompleted, although it would require some of the very heaviest construction.

BIG INTERURBAN PLAN.

Southern Traction Co. to Connect Dallas, Waco and Other Texas Cities.

Dispatches from Dallas, Tex., report the organization of the Southern Traction Co. by residents of Dallas, Hillsboro, Lancaster, Waxahachie, Waco, Corsicana, Ennis, West, Milford, Italy and Ferris, with J. F. Strickland of Dallas as president, to build an interurban railway from Dallas to Waco via Waxahachie, Hillsboro and Italy, 100 miles, with a branch from Waxahachie via Ennis to Corsicana, 35 miles, the entire line thus to be 135 miles long. Mr. Strickland, who is also president of the Texas Traction Co., which operates the electric railway between Dallas and Sherman, Tex., is quoted as saying that construction of the proposed road will begin immediately and that contract has been let to the Fred A. Jones Company for the engineering. Survey will start without delay from Waxahachie, surveys and reports having already been made on the line between Dallas, Waxahachie and Corsicana.

President Strickland is further reported thus: "The engineers are already moving their material to the field to begin work, and arrangements have advanced far enough both in the organization and in the financing of the enterprise for me to make the plain statement that work will not be stopped until cars are running from Dallas both to Waco and to Corsicana."

"This association is composed of a large majority of local people, who have already spent their money on the work heretofore done and are providing the funds for the future. This means, of course, co-operation in the communities through which these lines will run."

The directors of the company are J. F. Strickland of Dallas, president; Oscar Goodwin of Dallas, J. E. Whiteselle of Corsicana, J. T. Cole of Waxahachie and James B. Baker of Waco, vice-presidents; R. E. L. Saner and C. W. Hobson of Dallas, J. A. Thompson of Corsicana, George W. Coleman of Waxahachie, M. A. Cooper and H. H. Shear of Waco. Other officers are: T. A. Ferris of Waxahachie, treasurer; James P. Griffin of Dallas, secretary; W. H. Painter of Dallas, assistant secretary; M. B. Templeton of Dallas, general counsel. The executive committee consists of Messrs. Strickland, Goodwin and Hobson of Dallas, F. N. Drane of Corsicana and W. J. Neele of Waco. The trustees are Charles H. Allyn of Corsicana, W. D. Lacy of Waco, J. K. Parr of Hillsboro, S. M. Dunlap of Italy, J. Baldrige of Ennis, J. Houston Miller of Waxahachie and W. R. McDaniel of Milford.

There are two other companies which also propose to build railways from Dallas to Waxahachie. One of these is the Stone & Webster Corporation of Boston, which controls the Northern Texas Traction Co., operating the line from Dallas to Fort Worth, and the other is the Trinity Valley Traction Co., formed by J. V. Watkins and others, which aims to build not only to Waxahachie, but to continue its line to Corsicana and Palestine. J. N. Mitchell

of St. Louis is mentioned as one of those interested in the latter enterprise, which has been promoted for some time, and which, according to a statement quoting Mr. Watkins, is nearly ready to begin construction. It was only recently, however, that publication was made of the plan of the Stone & Webster interests to build the contemplated line to Waxahachie.

BIRMINGHAM TO SELMA.

Two Companies Reported Contemplating Construction of Another Railroad.

The Louisville & Nashville Railroad Co., according to a report from Birmingham, Ala., has under consideration a plan to build a line which will make a route for it from there direct to Selma, Ala. At present the company can reach Selma over its own lines from Birmingham by only a very roundabout way, but it would be possible for it to build a line 45 or 50 miles long from a connection with its Montgomery route between Clear Creek and Jemison, several miles south of Calera, direct to Selma, although the report intimates that the idea is to build direct from Birmingham or a point near there, in which event the extension would be about 70 miles long.

It is also reported that the Birmingham Southern Railroad is contemplating building an extension from Bessemer to Selma, which would provide a new route between Selma and Birmingham. Several months ago a survey was made by independent parties for the Cahaba Valley Railway, and it has been rumored from time to time since then that construction of an entirely new road would be undertaken.

New Equipment, Rails, Etc.

The Carolina, Clinchfield & Ohio Railway is in the market for five Mallet articulated compound locomotives and two Mikado type locomotives.

The Citizens' Railway, Waco, Tex., has purchased some additional pay-as-you-enter cars.

The Gulf, Florida & Alabama Railroad Co., which proposes to build from Pensacola north, is reported in the market for 20 miles of 70-pound steel rails. R. C. Megargel, 5 Nassau street, New York, and others are interested.

The Western Maryland Railroad is in the market for more equipment, and is figuring on the purchase of 30 consolidation locomotives and five Mallet articulated compound locomotives.

The Harriman Lines, it is reported, are about to order 21,000 tons of rails, probably from the Illinois Steel Co., Chicago.

The Shawnee Traction Co., Shawnee, Okla., is reported asking bids to furnish 4400 tons of standard section rails.

The Brinson Railway is reported to have received three new locomotives and 56 new box cars on its equipment orders.

The Metropolitan Street Railway Co., Kansas City, Mo., is reported to have placed an order for 2500 tons of 70 and 80-pound rails.

The Chesapeake & Ohio Railway, says a market report, will build 1300 cars in its shops and will purchase about 650 tons of steel center sills for them.

The Birmingham & Southern Railroad, it is reported, has ordered from the Pressed Steel Car Co., Pittsburgh, 25 gondola, 55 flat and 20 box cars.

The Missouri, Kansas & Texas Railway is reported in the market for 16 locomotives.

The Richmond, Fredericksburg & Potomac Railway is reported contemplating the purchase of four passenger cars.

The Seaboard Air Line, says a market report, will buy 14,000 tons of rails.

The Georgia Railroad is reported to have awarded contract to the Baldwin Works,

Philadelphia, for six 10-wheel locomotives. The Jacksonville (Fla.) Electric Co. will, it is reported, purchase 10 passenger cars.

The Rock Island is reported to have ordered 11 70-foot all-steel combination cars and 30 60-foot all-steel postal cars from the Pullman Company, Chicago.

The Georgia Railway & Electric Co., Atlanta, says a report, is building six cars in its own shops.

The Santa Fe, according to a market report, has ordered 20 passenger cars from the Pullman Company.

The Illinois Central, it is currently reported, has ordered five Pacific-type locomotives from the American Locomotive Co., New York.

The Kansas City Southern, according to a report quoting an officer, contemplates increasing its equipment by purchasing 25 locomotives, 25 passenger cars and 125 freight cars.

Kansas City & Memphis Plans.

It is announced that the formal absorption of the Arkansas, Oklahoma & Western Railway and the Monte Ne Railway by the recently chartered Kansas City & Memphis Railway Co. will take place about April 10. George D. Locke, president and general manager at Rogers, Ark., is quoted as saying that the existing lines consist of a road from Rogers to Siloam Springs, Ark., 31 miles, and another from Freeman, Ark., to Monte Ne, 6 miles, making a total of 37 miles of track. It is, therefore, a very modest enterprise at present, having only five locomotives, three passenger cars and 31 freight cars.

But a considerable extension is proposed, as heretofore reported, and the line when wholly complete will reach from Rogers, Ark., to Memphis, Tenn., 204 miles, and construction is under way on the first section of 20 miles between Cave Springs and Fayetteville, Ark., which will be completed ready for operation by September 1 next. This construction is in the northwestern part of Arkansas, but the proposed route to Memphis is indicated by the official statement that connections with other roads will be made thus: Frisco at Fayetteville, Missouri & North Arkansas at Searcy, Iron Mountain Route at Judsonia and Augusta, St. Louis Southwestern at Cherry Valley, and thence to Memphis.

It is proposed to issue \$6,000,000 of 5 per cent. 50-year bonds dated May 1, 1911, which are to be issued at not over \$18,000 per mile, that being \$15,000 for construction and equipment and \$3000 in reserve for betterments. Headquarters of the company are at Rogers, Ark., and 30 Broad street, New York.

New Railroad Enterprises.

The Elizabethton, Milligan & Johnson City Electric Railroad Co., capital \$25,000, has been chartered in Tennessee to build a line about eight miles long from Johnson City via Milligan College and Oak Grove to Elizabethton. The incorporators are W. G. Payne, James H. Smith, A. B. Brannon, W. C. Burchfield, J. N. Inders and J. G. Burchfield.

Dispatches from Dublin, Ga., report that J. H. Plummer of New York, J. R. Crandall of Midville, Ga., and J. O. Hall of Toombsboro, Ga., are looking into the feasibility of constructing a railroad, to be called the Georgia Midland & Gulf, from Athens, Ga., which is on the Seaboard Air Line, via Milledgeville, Toombsboro, Dublin and McRae to some point in the southwestern part of Georgia, and perhaps to the Gulf of Mexico. Such a line would probably intersect the new Georgia & Florida Railway south of McRae.

The Shelby Northwestern Railroad Co. has been chartered in Missouri to build a

line 15 miles long from Shelbyville to the north boundary of Shelby county; capital \$225,000. The stockholders include John A. Hope, Giboney Houck of Cape Girardeau, Mo.; J. H. Byrd, John Tlappek, H. M. Houck and G. F. Houck.

Work on Piedmont & Northern.

Construction has begun near Belton, S. C., under the contract of W. J. Oliver of Knoxville, Tenn., on the Piedmont & Northern Railway, and soon work will be in progress on other parts of the line, as the subcontractors are assembling men and materials for the task before them. Construction began about two weeks ago upon the line in North Carolina between Charlotte and Kings Mountain.

There are rumors that Mr. Oliver may undertake the construction of an extension of this line south from Greenwood to Augusta, Ga., about 70 miles, or this distance might be shortened by building to a connection with the Augusta & Aiken Electric Railway. Such a line could run via either Saluda or Edgefield, although the latter would be the most direct route.

A dispatch from Raleigh, N. C., says that the Piedmont Traction Co., which is the corporation in that State corresponding with the Piedmont & Northern in South Carolina, has increased its capital stock from \$100,000 to \$1,500,000.

Improvements on the Southern.

It is officially announced that extensive improvements will be made immediately by the Southern Railway on its line between Atlanta and Macon, Ga. The work includes the laying of about 20 miles of passing tracks and the revision of grades. The tracks will be of the kind known as lap sidings, which greatly facilitate train movements. They will be placed at intervals of about five miles, and each will accommodate four trains. This will afford many of the advantages of double tracks, and will greatly increase the capacity of this important line, over which are handled through passenger trains between Florida and the West, in addition to the regular passenger and freight service. During the last few months the company has finished strengthening the bridges, and is now operating over the road its heaviest locomotives. These proposed improvements will enable it to give better service, and will also provide for increase of business.

To Traverse a Good Country.

E. E. Trippe, Fristoe, Mo., says that the Osage, Ozark & Springfield Railway Co. has not completed organization, but it proposes to build an electric railway 80 miles long from Warsaw to Springfield, Mo., via Fristoe, Cross Timbers and Buffalo. Money is all subscribed for a preliminary survey from Warsaw via Fristoe to Cross Timbers. The route is along a level ridge for the entire projected line. There will be a bridge over the Osage River at Warsaw, and others over a few creeks. No tunnels. Connection will be made with the Missouri Pacific Railway at Warsaw and with the St. Louis & San Francisco Railroad at Springfield.

The promoters of the enterprise are seeking to interest capital in the road, which is described as traversing a rich farming district with good towns along the route and now without railroad facilities.

Progress on the San Benito Road.

Official information received concerning the San Benito & Rio Grande Valley Railway, San Benito, Tex., says that it is not incorporated, and stands in the name of S. A. Robertson, trustee. The letter containing the foregoing continues as follows: "It is contemplated to build about 45 miles. We now have 10 miles of steel laid

and about 20 additional miles graded. We have just purchased 13 miles of additional steel rails, and have sufficient ties on hand to lay 13 miles of track. There is no heavy work and no tunnels, as this is a level country, the work running only about 8000 yards per mile. The Hidalgo Construction Co. of this place has the contract for the entire work.

"Mr. C. E. Enslinger is chief engineer and Mr. S. A. Robertson is trustee and general manager. Have no other officers."

To Build the Cullman Railroad.

An officer of the Cullman Coal & Coke Co. is quoted as saying that it will complete its railroad this spring and summer from Cullman to Juliana via Trimble and Bremen, 28 miles, upon which 6½ miles of track have been laid. There will be 213,483 cubic yards of excavation, 5718 cubic yards of concrete for piers and abutments, and 578 tons of steel for bridges. There are 1551 cubic yards of the concrete already built, and the contractors for it are Arnott & Co. of Birmingham. The Virginia Bridge & Iron Co., Roanoke, Va., is contractor for the bridges. Maximum grade on the line will be very slightly less than 1 per cent., and the maximum curvature 9 degrees. Headquarters of the company at Cullman, Ala., with J. W. Jones chief engineer and G. H. Ten Broek president.

Mattamuskeet Railroad.

The Mattamuskeet Railroad Co., writes A. M. Dumay, secretary of the Chamber of Commerce at Washington, N. C., has graded 61½ miles of line from Fairfield to Belhaven, N. C., and rights of way are now being secured from Belhaven to Washington, 26 miles. Grading will soon be started between those points with convict labor furnished by the State. The entire line will be about 87 miles long. Bridging will consist of trestles. The route is level. Connections will be made with the Atlantic Coast Line and the Norfolk Southern railroads at Washington. S. S. Mann is president; C. W. Davis, treasurer, and R. Maxwell, chief engineer.

Sugar Land Railway Extends.

The Sugar Land Railway, says an official, has built a line to Anchor, Tex., and it is quite probable that this will be extended three or four miles to the Brownsville road in the near future. It is also hoped to be able to build before very long to Hempstead, Tex., but there is nothing definite yet as to when this will be started.

To Cultivate Cotton in Mississippi.

It is reported that Memphis capitalists and members of a spinning association of Manchester, England, are forming a syndicate to be capitalized at \$3,000,000 for the purpose of developing cotton land in Mississippi. The report states that 32,000 acres in Bolivar county will be purchased for about \$2,000,000, and that it is planned to invest during the first year about \$1,000,000 for improvements, steam plows, fertilizing, etc., for the scientific production of cotton. About 12,000 acres of the land is covered with a hardwood growth, which it is contemplated to remove. The *Memphis News-Scimitar* states that the Memphis parties interested are L. K. Salsbury, Isaac Reese, George H. Tucker, R. T. Fant and A. S. Buchanan.

George Weems Williams of Baltimore has been appointed receiver for the Washington & Rockville Railway Co., which has a line of electric railway running from Washington, D. C., to Rockville, Md., and connecting with street-car lines in Washington.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

WOOLENS AND WORSTEDS.

Advance in the Industry in the Past Ten Years.

The preliminary figures of the woolen and worsted goods industry issued by the Census Bureau show that the amount of capital invested increased from \$256,554,000 in 1899 to \$415,465,000 in 1909, or 62 per cent., and that the value of products increased from \$238,745,000 to \$419,826,000, or 76 per cent. Comparison of leading items in the industry in 1899, 1904 and 1909, the figures not including the manufacture of carpets, felt goods, wool hats, hosiery, knit goods, shoddy and independent dyeing and finishing establishments, are as follows:

	Census			Per cent.
	1909.	1904.	1899.	of increase, 1899 to 1909.
Number of establishments.....	913	1,018	1,221	*25
Capital.....	\$415,465,000	\$392,767,000	\$256,554,000	62
Cost of materials used.....	\$273,466,000	\$197,489,000	\$148,087,000	85
Salaries and wages.....	\$79,214,000	\$61,433,000	\$50,126,000	56
Miscellaneous expenses.....	\$21,347,000	\$16,520,000	\$14,036,000	52
Value of products.....	\$419,826,000	\$397,942,000	\$238,745,000	76
Value added by manufacture (products less cost of materials).....	\$146,360,000	\$110,453,000	\$90,658,000	61
Employees:				
Number of salaried officials and clerks.....	5,325	4,324	3,615	47
Average number of wage earners employed during the year.....	162,914	141,998	125,901	29

*Decrease.

The Census Bureau finds interesting and important changes in the character of materials used in the past decade. The quantity of wool consumed, in condition purchased, increased from 330,179,000 pounds to 474,751,000 pounds, or 44 per cent.; reckoned on a scoured-wool basis, the increase was 50 per cent. The quantity of raw cotton consumed decreased from 40,245,000 pounds to 20,055,000 pounds, or 50 per cent., while the amount of cotton yarn purchased increased from 35,343,000 pounds to 39,169,000 pounds, or 11 per cent. The net result is a decided decrease in the amount of cotton used as a material by wool manufacturers.

The figures also show a marked decrease in the use of shoddy. The quantity purchased decreased 35 per cent., and the amount manufactured in woolen mills for use therein fell off 10 per cent. In 1899 the total amount of shoddy consumed by woolen and worsted manufacturers was 68,663,000 pounds; in 1909 it was only 53,621,000 pounds, a decrease all the more significant when the growth of the industry is considered. This is explained by the fact that the manufacture of worsted fabrics, into which shoddy does not enter as a material to any appreciable extent, has increased enormously, while the quantity of woolen fabrics in which shoddy is utilized was actually less in 1909 than in 1899.

The quantity of tops purchased as materials increased from 5,506,000 to 20,828,000 pounds, or 274 per cent., and the quantity of worsted yarn from 25,111,000 to 58,769,000 pounds, or 134 per cent. These increases are due not only to the rapid growth of the worsted branch of the industry, but also to the greater degree of specialization which developed within that branch. Weavers of worsted fabrics usually purchase their yarn instead of spinning it themselves, and although worsted spinners usually comb their own wool, they are purchasing tops to an increasing extent.

As to products, the census finds that the

most notable figures are the great increases in quantities and values of worsted fabrics, and the pronounced decreases in the quantities and values of many kinds of woolen fabrics produced. Of the all-wool goods, the value of woolen suitings and overcoatings increased 5 per cent., and woolen dress goods 26 per cent. Worsteds suitings, on the other hand, increased 136 per cent. in value and 119 per cent. in quantity, and worsted dress goods 231 per cent. in value and 83 per cent. in quantity, both showing a much higher value per square yard in 1909 than in 1899. All-wool flannels for underwear decreased both in quantity and in value, while all-wool blankets decreased slightly in quantity, but gained in value.

Of the union or cotton-mixed goods produced, the value of men's wear fabrics decreased 39 per cent., and the value of women's dress goods 52 per cent. Mixed cotton and wool blankets showed a gain of 154 per cent. in value.

Of goods woven on cotton warps, wool-filling suitings showed a slight increase in quantity, but a decrease of 1 per cent. in value, denoting a drop in price per square yard—due possibly to the use of inferior materials in this class of goods. Worsteds filling suitings and overcoatings increased

111 per cent., and linings, Italian cloths, etc., which are worsted rather than woolen goods, gained 208 per cent. in value. Satinets, linseys and cotton-warp blankets decreased both in quantity and value.

On the whole, the values per square yard of cloth manufactured were much higher in 1909 than in 1899. Among the reasons for this may be given higher costs of production and an improvement in the general quality of goods made.

The relative amounts of woolen and worsted fabrics produced are more clearly brought out by combining the items of the above statement which fall in each of the two classes. In 1899 the number of square yards of worsted suitings, overcoatings and dress goods, worsted-filling suitings, overcoatings and dress goods, and linings, Italian cloths, etc., was 181,228,000, while in 1909 there were 350,659,000 square yards, an increase of 93 per cent. A combination of the remaining items shows 245,723,000 square yards of woolen cloths made in 1899, and 220,740,000 square yards in 1909, or a loss of 10 per cent.

Of the partially manufactured products made for sale, wool waste shows a gain of 185 per cent. in value over the 1899 figures. The large increase in quantity and value of noils produced for sale is another evidence of the growth of the worsted branch of the industry, and the large quantity of worsted yarn which enters the channels of trade is due to the fact that worsted spinning and weaving are not usually carried on under the same roof.

New Southern Cotton Mills.

Activity in organizing mill companies and planning to enlarge established mills in the South during the first quarter of the year resulted in announcements totaling 59,500 spindles and 1690 looms. This machinery, with accompanying equipment, buildings, land improvements, etc., will involve an investment of about \$1,500,000. Of this amount, \$1,000,000 is the capitalization of one plant. Another plant of

interest will be the \$75,000 enterprise to manufacture oilcloth at St. Louis. The \$40,000 company organized at El Paso, to employ Mexican and Indian hand workers on the production of drawn work, is another enterprise of interest. Details

of these various plans have been stated by the MANUFACTURERS RECORD during January, February and March.

A tabulated list of the new and enlarging mill enterprises of the first quarter is as follows:

COTTON MILLS.

Name.	Location.	Spindles.	Looms.
*Siluria Cotton Mills Co.....	Siluria.....	.....	499
Castle Cotton Mills.....	Georgin.....	55,000	1200
National Oilcloth Co.....	Missouri.....	.....	.....
French Broad Manufacturing Co.....	North Carolina.....	.....	.....
*Newton Cotton Mill.....	Newton.....	.....	60
*Flint Manufacturing Co.....	Gastonla.....	2,500	.....
Crown Cotton Co.....	South Carolina.....	.....	.....
*Oconee Cotton Mills Co.....	Greenville.....	.....	.....
*Riverside Manufacturing Co.....	Westminster.....	.....	.....
*Toxaway Mills.....	Anderson.....	.....	.....
*Cuero Cotton Mills.....	Anderson.....	.....	.....
Mexican & Indian Drawn Work Co.....	El Paso.....	2,000	.....
Total for first quarter of year.....	.....	59,500	1690

*Established mills enlarging.

Southern Knitting Mills.

During the first quarter of this year there were eight new Southern knitting mills announced as to be established. Five of these enterprises will have a total capital stock of \$107,000, the capital stock of

the other three not being stated. One company increased its capital stock from \$50,000 to \$100,000 for improved facilities in building and machinery.

The new mills announced were as follows:

KNITTING MILLS.

Name.	Location.	Capital stock.
James Knitting Mill Co.....	Mt. Pleasant, N. C.....	\$50,000
W. A. Ellington.....	Sauferd, N. C.....	15,000
Tar River Hosiery Mills.....	Washington, N. C.....	.....
Robert E. Lee.....	Lumberton, N. C.....	.....
Mt. Vernon Knitting Co.....	Baltimore, Md.....	20,000
Allgood Hosiery Mills.....	Vaughan, N. C.....	12,000
Fuller Knitting Mills.....	Villa Rica, Ga.....	10,000
S. C. Meade.....	Anniston, Ala.....	.....
		\$107,000

Dunson Mills.

The Dunson Mills of Lagrange, Ga., has awarded all contracts for plant mentioned last week. Building contract calls for completion by September 15, and was awarded to the Pike Bros. Lumber Co. of Lagrange. Main mill will be of brick, two-story type, with one-story weave shed, 132x572 feet, costing about \$96,000. It will have 20,000 spindles, 400 to 500 looms 40 to 72 inches wide, carding and picking machinery, etc., for manufacturing ducks, drills, twills, sheetings and osnaburgs from 36 to 72 inches wide weighing from 4 to 17 ounces per yard, of both single and twisted filling. A 1200-horse-power steam plant costing about \$26,000 will be installed for power. All the machinery will cost about \$300,000. About 220 persons will be employed, about 13,000 pounds of cloth will be the daily output, and the plant is expected to be completed by January 1. The company will erect 100 cottages for its operatives, each house to be fenced in on a lot 90x150 feet, so as to provide ample space for cultivating garden foods and flowers.

Machinery will be furnished as follows: 1500-horse-power cross-compound engine by C. & G. Cooper Co., Mt. Vernon, O.; boilers and accompanying equipment by R. D. Cole Manufacturing Co., Newnan, Ga.; pickers by Kitson Machine Shop, Lowell, Mass.; carding and spinning by Whitin Machine Works, Whitinsville, Mass.; looms and warpers by Draper Company, Hopedale, Mass. J. E. Dunson is president of the Dunson Mills, the capital stock being \$500,000. J. E. Sirmis of Greenville, S. C., is the architect-engineer in charge.

Guadalupe Valley Cotton Mills.

The Guadalupe Valley Cotton Mills is the corporate name of the Cuero Cotton Factory of Cuero, Tex., under the reorganization recently outlined. This new company will expend \$50,000 for new machinery, new buildings, etc. It will erect

a 60x100-foot addition to the main buildings and build an additional warehouse and opening-room, besides adding picker and carding and spinning machinery to increase daily capacity to about 5000 pounds. It will overhaul all the old machinery and have it ready for operation with the new equipment, which has been contracted for, by September. Building contracts will be let during April. The enlarged plant will have 8000 spindles and 160 looms for manufacturing heavy sheetings and drills, light and heavy duck, both single and twisted filling.

New England Mill Men.

At the annual meeting, April 12-13, of the National Association of Cotton Manufacturers at Boston the paper subjects to be discussed will include arbitration on cancellation of orders, co-operation between bureau of the Federal Government and textile manufacturers, efficient buying of raw material, how the cotton industry has safeguarded its employees, law of moisture in cotton, power from producer gas, production of cotton in the Honolulu Islands, renaissance of the waterfall, standardizing the artificial illumination of cotton mills, textile education from a manufacturing standpoint, transmission of power by ropes and uniform contracts.

A \$15,000 Knitting Company.

The organization of a \$15,000 stock company to install hosiery knitting machinery at Morganton, N. C., is planned by R. B. Moore and T. L. Sigmon of that city.

Union Cotton Bagging Corporation.

The Union Cotton Bagging Corporation of Norfolk has been chartered with a capital stock of \$300,000, has acquired and will continue the plant of the Margolis Company and will establish a branch at Spartanburg, S. C. It will probably be in the market for additional pickers, ginning and mixing machin-

ery. Officers have been elected as follows: President, R. Margolius of Norfolk; vice-president, Lawrence S. Holt, Jr., of Burlington, N. C.; secretary-treasurer, J. Harper Erwin of Durham, N. C.

United Hosiery Mills.

The United Hosiery Mills of Anniston has been organized with an authorized capital stock of \$100,000. The company has a 65x100-foot brick building, and will install 65 knitting machines, which have been purchased. Its daily capacity is to be 250 dozen pairs of hose, and about 25 operatives will be employed. S. C. Mead is president; L. V. Moore, secretary; J. W. Hellings, treasurer. This is the plant mentioned last week as to be established by S. C. Mead.

Corsicana Cotton Mills.

The Corsicana Cotton Mills, Corsicana, Tex., has reorganized with a capital stock of \$100,000 and will resume manufacturing flat cotton duck. This company has 5000 spindles and 150 looms. Its officers are: President, G. J. Hedlin; vice-presidents, C. H. Allyn and J. E. Whiteselle; secretary-manager, M. E. Woodrow; treasurer, E. E. Sheehy; superintendent, O. M. Peters.

Westervelt Mills.

Last week's statement that the Westervelt Mills of Greenville, S. C., intended to award buildings contract on April 3 was an error. That company awarded its buildings contract in February, as then stated, and the work of excavation is well under way. It is erecting structures that will be equipped with 50,000 spindles and 1200 looms for manufacturing India lawns and linens. This is a \$1,000,000 company and J. I. Westervelt is its president. Other details have heretofore been announced.

A \$150,000 Woolen Mill.

It is probable that \$150,000 will be the cost of the woolen mill mentioned last week as proposed for San Angelo, Tex. The Chamber of Commerce is not as yet prepared to announce the names and addresses of the parties contemplating the plant.

Increasing Capital by \$150,000.

The Greer Manufacturing Co. of Greers, S. C., will increase its capital stock from \$200,000 to \$350,000. It is now operating 10,240 ring spindles and 280 broad looms on the production of sheetings.

Textile Notes.

The Mineola Manufacturing Co., Gibsonville, N. C., has awarded contracts for 100 box looms to replace old looms, and for three napping machines.

J. M. Bruner, secretary of the Oconee Mills Co. of Westminster, S. C., has also been elected secretary of the Middleburg Mills of Batesburg, S. C.

It is rumored that the Calhoun Mills of Calhoun Falls, S. C., expects to increase to 40,000 spindles in the future. The company now has 25,600 ring spindles, 600 broad looms, etc., driven by electric power.

The Springfield (Tenn.) Woolen Mill Co. will erect an additional building costing \$2500, and has awarded contract to E. T. Lewis & Co. of Nashville. The company's mill now has 2640 spindles, 42 looms, etc.

The Elmore Manufacturing Co., Benjamin F. Elmore, manager, Demopolis, Ala., expects to resume manufacturing within 30 days. Its plant of 4000 spindles will employ 125 operatives and was mentioned last week.

MINING

J. B. B. Coal Co.

The MANUFACTURERS RECORD has a statement from H. M. Jewett of Jewett, Bigelow & Brooks, Detroit, Mich., outlining his firm's change of operations in the Pocahontas field of West Virginia. Mr. Jewett writes as follows:

"We have consolidated all our mines in the Pocahontas field, and they will hereafter be known as the J. B. B. Coal Co., with a capital stock of \$500,000. The following are the officers and directors: H. M. Jewett, Detroit, Mich., president; Edward Page, Boston, vice-president; Robert Grant, Boston, treasurer; W. R. Ballantine, Boston, secretary; J. W. Bigelow, Twin Branch, W. Va., general manager.

"The mines were consolidated and a new company formed on March 1, and the New England Coal & Coke Co. of Boston purchased an interest April 1.

"The New England Coal & Coke Co., which is a subsidiary company of the New England Gas & Coke Co., Boston, has been the New England agent of Jewett, Bigelow & Brooks mines, in the Pocahontas field, for the last two years, and has used the coal for the general trade in its territory during that period.

"Steps will immediately be taken to increase the production of the mines, and within the next few months should be on a basis of production of considerably over 1,000,000 tons per annum.

"The New England Coal & Coke Co. will by this arrangement have the output of the mines, which is consigned to tidewater, of the highest class smokeless coal; its own steamer and barge transportation on the Atlantic; its own storage docks in the New England State, and will, therefore, be in a position to supply coal from its mines to the consumer.

"Jewett, Bigelow & Brooks of Detroit, under this arrangement, will ship coal to all rail trade in the South and West, the Great Lakes and tidewater outside of the New England States."

Oklahoma's Minerals.

The work of the Oklahoma Geological Survey is attracting much attention, not only in the State, but all over the South. With a vast amount of undeveloped mineral resources, this new State is today manufacturing very little. The survey, although it has been organized only a little more than two years, has already been able to locate many of these dormant minerals and to interest capital in their development.

The last Legislature made liberal appropriations for continuing this work. The bill signed last week by Governor Cruce carried approximately \$19,000 a year for the next two years.

Director Charles N. Gould has made tentative plans for four field parties the coming summer, including work in the oil fields, in the Wichita Mountain region and along the Pennsylvania-Permian contact. A series of economic bulletins dealing with the mineral resources of Oklahoma is being prepared. Two numbers have already been issued. Reports are in press on oil, gas and asphalt, on structural materials, on the mineral resources of the Arbuckle Mountains, and on clays, and reports on coal, lead and zinc, road materials, gypsum and salt will soon be submitted for publication.

These bulletins can be obtained by sending three cents for postage to the Geological Survey at Norman, Okla.

Albemarle Slate Corporation.

The Albemarle Slate Corporation, which was chartered recently with a capital

stock of \$2,500,000, plans to develop 457 acres of land at Esmont, Va. It intends to install machinery for an ultimate daily output of 500 squares of slate, and on April 15 will open bids for the mining machinery. This equipment will include channelers, drills, wire saws for stone, steam and belt-driven air compressors, water-tube boilers, double-drum hoists and derrick fittings. Organization has been effected, and the officers include George Norris, president; A. S. Rickwood, vice-president; George Blow, manager—all of New York, with offices at 55 Liberty street. Mr. Blow can be addressed either there or at the New York office.

Developing 500,000 Acres.

The American Timber & Coal Co. telegraphs the MANUFACTURERS RECORD that the company is now developing 500,000 acres of Kentucky and Tennessee land by making coal leases and selling stumpage. This company has organized with offices at 517 Johnston Building, Cincinnati, and it will also engage in colonizing and general land title work. Its lands are on the Cumberland plateau, in Cumberland, Bledsoe, Fentress, Morgan, Overton and Rhea counties, in Tennessee. The company has a capital stock of \$5,000,000, and its officers are: President, E. R. Buck; vice-president, George W. Platt; secretary, Wm. H. Durham; treasurer, Dr. Thomas M. Stewart; general manager, George H. Black.

Kentucky-Tennessee Phosphate Co.

The MANUFACTURERS RECORD is advised that Ed. Strudwick (not Stridecock, as stated last week) of Richmond, Va., is president of the Kentucky-Tennessee Phosphate Co., which was chartered with \$500,000 capital stock. This company has not as yet announced details of its development plan.

Rock Shipments Break Record.

Shipments of phosphate rock from Florida have been breaking records, as is seen by the following statement from the Tampa Tribune:

"Phosphate shipments during March from Tampa and Port Tampa show the largest total for any one month in the history of the port. The number of tons shipped from Port Tampa shows an increase over the same month to the extent of 14,000 tons, while at the Seaboard elevator the amount shipped during the past month was more than double that shipped a year ago.

"March, 1910, the Seaboard elevator shipped 13,550 tons of rock; March, 1911, the month just passed, it shipped 50,772 tons of phosphate, nearly four times that amount.

"At Port Tampa the Atlantic Coast Line shipped during the month of March, 1910, 70,339 tons. But in the month of March, this year, it shipped 84,000 tons, or 13,661 tons more than the same month of the previous year.

"During the past month the Seddon Island terminals shipped more than it has for any month in its history. February, 1911, was the banner month until the March figures were totaled, this month beating the previous one by 10,130 tons.

"April at the Seaboard elevator promises to be a good one also. To begin with, the Leyland liner Indian has berthed there today to load 5000 tons of phosphate.

"Every ton of phosphate exported from Seaboard or Coast Line terminals averages a valuation of \$5. This means that the value of the mineral exported from Tampa in March totaled \$673,860."

A co-operative colony is to be established on 24,000 acres of land near Crystal Springs, Fla.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Champion Lumber Co. Chartered With \$5,000,000 Capital Stock.

An extensive and important timber and railway development enterprise for North Carolina to be undertaken by capitalists already interested in that State has been announced. The essential details may be briefly outlined as follows: The Champion Lumber Co. of Canton, N. C., has been chartered with a capital stock of \$5,000,000, and has purchased for development over 100,000 acres of Haywood county lands centering about Canton, with accompanying mill and railway properties. These include the Pigeon River Lumber Co., with 60,000 acres in the northern part of the county; the Champion Fiber Co.'s Sunburst tract of 40,000 acres on the headwaters of Pigeon River; the Tennessee & North Carolina Railroad, now extending from Newport, Tenn., to Crestmont, Tenn., and surveyed for extension to Canton, and the Pigeon River Railroad Co., whose railway is now graded between Canton and Sunburst. The new corporation plans to rebuild the Pigeon River Lumber Co.'s mill at Crestmont and to install additional machinery, increasing its daily output to 175,000 feet of lumber, and plans to construct between Canton and Sunburst a large mill for manufacturing hardwood lumber from the timber of the Sunburst tract. Plans are also being considered for extending the railways. The Champion Lumber Co. officers include: President, R. F. Whitmer, who is of Wm. Whitmer & Sons, Philadelphia; general manager, J. Arbogast of Asheville, N. C., who has represented Whitmer interests in North Carolina for several years. Others interested in the enterprise are Messrs. Peter G. Thompson, president of the Champion Fiber Co., Canton, N. C.; J. B. Leach & Co. of New York, Clark L. Poole & Co. of Chicago, and Trimble, De Witt & Co. of New York and Chicago.

To Develop 90,000 Acres.

The MANUFACTURERS RECORD has received a telegram outlining the facts as to the Mt. Mitchell (North Carolina) timber sale and development enterprise regarding which various reports are current. The telegram states in effect that S. Montgomery Smith of Asheville, N. C., has purchased 19,000 acres of Yancey county timber lands and sold the spruce on 8000 acres to Charles Edgar of Evanston, Ill., at \$10 per thousand in the log delivered at mill. This plant will be erected, and is to have a daily capacity of 75,000 feet of lumber. It will be a band-saw mill. An Asheville company is organizing to purchase and develop 10,000 acres of hardwood timber land on Mr. Smith's Yancey county tract, and it is stated that a sash and door factory, a hardwood flooring plant, a stove mill and a pulp and paper mill are practically assured.

A \$500,000 Company.

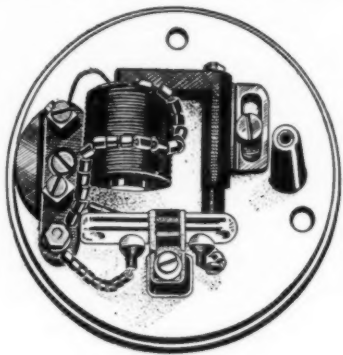
The Allnite Coal & Lumber Co. of Richmond, Ky., has been chartered with a capital stock of \$500,000 by John E. Lynch, John C. Chenault and Joseph Chenault.

The Statesville (N. C.) Cotton Mills will add 3000 spindles, with accompanying carding machinery, and contract has been awarded for the new equipment. This company is now operating 10,000 ring spindles, 2000 twister spindles, 180 broad looms, etc., on sheeting and yarn production.

MECHANICAL

The "Limitator."

A device for limiting the current demand on metered customers or for use as a flat rate controller is illustrated herewith. The apparatus prevents the customer using more than a certain amount of current by causing the light to flicker rapidly as soon as any excess load is turned on. The device consists of a small horizontal vacuum tube containing two mercury cups on the lower side, with leading-in wires sealed into the glass and making contact with a globule of mercury in each cup. A soft iron bar or needle rests on the globules of mercury and normally completes the electrical circuit between the two leading-in wires. Above one end of the needle is a small electro-magnet in series with one mercury cup. The height of the magnet above the needle is adjusted by a set screw and slot in its frame. The instrument is placed in one leg of the circuit, the current passing first through the magnet, then to the left-hand mercury cup through the needle to the right-hand cup, and thence to the load. The action is as follows: When the load exceeds the predetermined limit the magnet lifts the needle away from the mercury cup and breaks the circuit. This interrupts the current in the magnet, which allows the needle to drop back in the cup and the cycle is repeated, producing a continuous flickering of the lights as long as the ex-



THE "LIMITATOR."

cess load is maintained. The adjustment for different limits is made by simply raising or lowering the magnet until the lights remain steady on the desired load, but will flicker if another lamp is added. When this adjustment is once made it will remain accurate to within a few watts indefinitely.

The size illustrated can be adjusted for loads up to three amperes. For currents of from three to ten amperes an instrument of similar design is used in which the needle is omitted and a horizontal column of mercury completes the circuit. When an excess load is applied the magnet in the larger type tilts up the tube and the mercury runs down to one end, thereby breaking the circuit for an instant until the tube is dropped to the horizontal position again. With this size the lights go out and light alternately, keeping up this operation indefinitely. It is therefore possible to use the "Limitator" for blink electric signs.

It can be used on either direct or alternating currents of any ordinary lighting voltage without special adjustment. Installed as a substitute for meters, it not only saves the entire expense of meters, reading and maintenance, but greatly reduces the cost of equipment, bookkeeping and billing. It adds but little to the present meter expense when used in series with a meter for charging by the kilowatt hour on a demand rate basis.

The Southern Engineering Corporation.

Gunther Building, Baltimore, handles this device for the manufacturer.

Terra-Cotta Specifications.

A recent address to the Architectural League of Atlanta contained timely "pointers" of interest as to terra-cotta specifications. It was made by W. C. Hall, Jr., district manager of the Atlanta Terra-Cotta Co. of East Point, near Atlanta, and of the Atlantic Terra-Cotta Co., 1170 Broadway, New York. He said in part:

"As the architect's specification is the first thing we manufacturers run up against when we take hold of a piece of work, let us start with that now. Of course, you architects specify that the material shall have the proper alignment; you expect to get it, and so you should. You then specify that the color should be uniform; this is disputable. Terra-cotta cannot be burned to an absolute uniformity of color. The architects who have made a study of terra-cotta and who are using tons of it every day on their work, and who know what its values are, often ask us not to get too uniform a shade.

"Now, we often read in a specification that the terra-cotta must match the face brick. Wouldn't it be fairer to ask the brick man to match the terra-cotta? Bricks are sorted for the color after they are burned; they are a stock product. Terra-cotta is made to order, and we have only one chance for a color. The terra-cotta companies are working with their chemists to develop new colors and new shades, but the development takes time; we cannot go ahead at a moment's notice and match every odd color of face brick. Do you really think it a good idea to match the brick, anyhow? Put the piece in the building 50 feet in the air; it matches the brick all right; it looks exactly like the brick.

"We are every day up against the 'semi-glaze' specifications. Remember, there is no such thing as 'semi-glaze' for surface. The surfaces are as follows: Standard, matt, full glaze and polychrome. If you specify semi-glaze, the result is that you put the man who figures the job in a quandary.

"It takes eight weeks to make a good piece of terra-cotta. As soon as we receive the necessary drawings they are immediately sent to the drawing office, where three-quarter-inch working drawings are made and sent to the architect for approval, and finish shop drawings to a shrinkage scale are made. If there is any modeling on the job the modeler takes hold. From there it goes to the plaster shop, where the molds are made; from the plaster shop to the pressing shop, where the clay is pressed entirely by hand labor into the molds. After the pieces are taken out of the molds they are sent to the drying floors, and there thoroughly dried; this is a slow process, as fast drying will crack the material. After a piece is dried it goes to the sprayers, where the color is pneumatically sprayed on with an arrangement similar to the ordinary atomizer; then from the sprayer it goes to the kilns for burning. This takes in all from 12 to 14 days; that is, the burning and unloading. From the kilns it goes to the rubbing bed, where the joints are ground true, and then to the fitting shop; here the work is laid out and carefully fitted to sizes shown on drawings, numbered and packed in cars for destination. So you see where the eight weeks go.

"Polychrome terra-cotta is by far the most interesting problem we have. It is a new development, and one which has given the architect a new and fascinating tool to work with, and one which has lifted the terra-cotta manufacturer from

the place of the ordinary and prosaic manufacturer of a cheap substitute for stone.

"Polychrome means many colors, and that is exactly what the terra-cotta people have to offer the architect today—any color he wants. These colors, burned in clay as they are, have a softness and a texture that it is impossible to get in any other material. The architect of today can now use color on exterior work without fear of its fading. You have a material to work with that will enable you to give to our commercial and practical-looking office buildings the life and snap that is so apparent in the Old World cities and so woefully lacking in our own. Don't be afraid of it; use color as much as you can, but study it out first, and then go at it. It has met with favor in the North, but the South is where it belongs, with all of its outdoor life. Use polychrome terra-cotta, and see how really interesting it is.

"If you will remember some of these don'ts you will simplify the terra-cotta proposition: Don't ask us to match every brick. Don't specify semi-glaze. Don't hold up details until the last minute. Don't ask us to furnish iron. And lastly, when you are on the job, judging as to color, remember to be reasonable."

Avery Traction Engine Uses.

The Avery traction engine is adapted for various useful purposes that will in-

These instances of the usefulness of the equipment are only two of many that could be named, such as sawing lumber, hauling lumber, handling trees and logs, threshing, plowing, stacking hay, tearing up old macadam, hauling crushed rock for road construction, etc. The Avery engine is built by the Avery Company of Peoria, Ill. The company also builds farm wagons, engines, threshers, steam plows, etc., and manufactures agricultural implements.

American Ingot Iron.

Manufacturers who use iron for the production of sheet metal work, roofing, siding, culverts and other articles in constant demand throughout the country are invited to investigate American ingot iron. This iron is made by the American Rolling Mill Co. of Middletown, O., and it is in large demand both in this country and abroad because of its qualities. The American company especially emphasizes the rust-resisting features of its ingot iron in a publication it has recently issued. This publication is a booklet entitled "The Proof—American Ingot Iron Rust Resisting," and it contains a complete argument on the corrosion of iron and steel, together with useful tables relating to sheet metal work, black and galvanized sheets, etc. Desiring a wide distribution of this booklet, the American Rolling Mill



EVERY ENGINE HAULING LOGS.

terest operators in the South, two of these purposes being illustrated herewith. One view represents the Avery double under-

Co. has decided to send it free to inquirers who are interested in iron for the purposes mentioned.



EVERY ENGINE PULLING STUMPS.

mounted engine engaged in stump pulling, in this case the stump having been pulled. The second view is an Avery underground engine about to ford a creek while pulling a load of logs in the Ozark Mountains.

It is reported that the Shenandoah Valley Fruit Growers' Association, which is to change its name to the Virginia Fruit Growers' Association, did a business last year of \$170,000 upon a capital of \$150.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "it is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

"In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned."

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription for the contract period to the Daily Bulletin is included.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—Jefferson County Board of Revenue awarded contract at total of \$10,000 for construction of 19 reinforced concrete bridges, two steel bridges and two sub-structure steel bridges; structures will cost from about \$400 to \$1500 each. (Recently mentioned.)

D. C., Washington.—Commissioners District of Columbia (Cuno H. Rudolph and others) awarded contract to Penn Bridge Co., Beaver Falls, Pa., to repair and strengthen bridge across Rock Creek Park at Calvert St.; estimated cost \$24,000, of which Congress appropriated \$12,000 and railway company a similar amount. (Recently mentioned.)

Fla., Brooksville.—Town will vote April 25 on \$2000 of bonds for bridge construction; W. A. Thaxton, Town Clerk. (Recently noted.)

Fla., Orlando.—Orange County Commissioners contemplate construction of drawbridge across St. Johns River at Cook's Ferry.

Ga., Rome.—W. M. Gammon, chairman Board of Commissioners Roads and Revenue, Floyd county, advises that concrete steel bridges over all streams and concrete culverts over all drains will be constructed in connection with proposed road from Rome to Chattanooga; construction by convicts. (See "Roads and Streets.")

Ga., Thomasville.—Thomas County Commissioners decided to replace all wooden bridges with steel structures.

Ky., Paducah.—Board of Public Works will receive sealed bids until 10 A. M. April 17 for

construction of \$35,000 steel reinforced concrete bridge recently mentioned; L. A. Washington, City Engineer. (See "Machinery Wanted.")

Md., Denton.—Talbot and Caroline County Commissioners awarded contract to York Bridge Co., York, Pa., for construction of 70-foot steel drawbridge over Choptank River. (See "Road and Street Work.")

Md., Towson.—Andrew J. Miller & Co., Dundalk (P. O. Sparrows Point), Md., have contract and begun construction of reinforced concrete bridge over Back River at Eastern Ave.; structure will be 1100 feet long and will have concrete driveway and two sidewalks; cost about \$34,000; have purchased material and machinery; Henry G. Shirley, county roads engineer. (Previously mentioned.)

Mo., Elvins.—City will construct steel bridge across Flat River; bids will soon be invited. Address The Mayor.

Mo., Warsaw.—Osage, Ozark & Springfield Railway Co. (electric) contemplates erection of bridge across Osage River in connection with proposed line from Warsaw to Springfield; also erect creek crossings. Address care of E. E. Tripp, postmaster, Frisco, Mo.

Tex., Lampasas.—Lampasas county voted issuance of bonds for construction of bridge across Lampasas River to cost about \$7000. County Commissioners will receive bids April 20 for construction. (Recently mentioned.)

Tex., Smithville.—Smithville district of Bastrop county will vote on issuance of \$100,000 of road bonds. Address Precinct Commissioners.

Tex., Wichita Falls.—Wichita county voted issuance of bonds for construction of wagon bridge across Wichita River to cost about \$15,000. Address County Commissioners. (Recently mentioned.)

Va., Fredericksburg.—Irving D. Ireland, consulting engineer of Virginia Equipment & Supply Co., 305 Bank of Richmond Bldg., Richmond, Va., states that his company is lowest bidder for erection of 75-foot beam bridge across Hazel Run; contract not signed; Mr. Ireland now designing arch of 50-foot span (preferred by Commissioners), to cost about \$2500.

Va., Petersburg.—Matoaca Bridge Construction Co. will organize to construct two-span steel toll wagon bridge across Appomattox River, connecting Matoaca in Chesterfield county and Ferndale in Dinwiddie county; structure will be 250 feet long, 16 feet wide and of 12 tons capacity; approaches will be oak trestle; cost \$7500; date of opening bids not set; W. M. Martin, secretary Chamber of Commerce, may be addressed. (See "Machinery Wanted.")

CANNING AND PACKING PLANTS

Fla., Coconut Grove.—Dade County Citrus Association Sub-Exchange, W. T. Carter, manager, Miami, Fla., will erect packing-house for Coconut Grove Association; included in equipment will be machine capable of manufacturing 800 or 900 crates daily.

Ky., Salvisa.—Mercer Canning & Manufacturing Co. incorporated with \$4000 capital stock; succeeds Salvisa Canning & Preserving Co.; has buildings; will also manufacture brooms; W. K. Tox, president; E. Gill, vice-president; J. A. Kennedy, secretary; M. E. Walker, treasurer.

Tex., Lufkin.—Lufkin Canning & Preserving Co. has organized with T. W. Largent, president, R. B. Bledsoe vice-president, L. H. Gray secretary, J. M. Singleton treasurer; has machinery; daily capacity 5000 to 10,000 cans of fruit and vegetables. (Recently reported incorporated with \$63,000 capital stock.)

CLAYWORKING PLANTS

Tex., Marshall.—Marshall Brick Plant, W. H. Pugh, general manager, will soon begin erection of proposed brick plant; contemplated capacity at start, 50,000 to 60,000 bricks daily. (See "Machinery Wanted.")

COAL MINES AND COKE OVENS

Ala., Birmingham.—American Coal Corporation incorporated with \$5000 capital stock; E. J. Snower, vice-president; C. C. Covington, secretary-treasurer.

Ky., Empire.—Empire Coal Co. incorporated; leased property of Empire Coal & Mining Co.; will improve and operate. W.

T. Rutland is president; A. V. Rutland, general manager, and N. M. Rutland, secretary-treasurer; all of Hopkinsville, Ky.

Ky., Richmond.—Allrite Coal & Lumber Co. chartered with \$500,000 capital stock by John E. Lynch, John C. Chenault and Joseph Chenault.

Tenn., Chattanooga.—Patten Coal Mining Co., John E. Patten, president (recently noted incorporated), was organized to hold coal lands; no developments contemplated for near future.

W. Va., Danville.—J. F. Rison and associates purchased coal lands for \$300,000 and will develop.

W. Va., Moundsville.—Ben Franklin Coal Co., Freeport, Pa., will develop coal mines near Moundsville.

W. Va., Wellsburg.—Lewis-Flindley Coal Co., W. A. Lewis, president, Pittsburgh, Pa., increased capital stock from \$200,000 to \$1,000,000; purchased additional acreage of 2500 acres of coal land; daily output 2000 tons of coal; machinery purchased.

CONCRETE AND CEMENT PLANTS

Ala., Ragland.—Clarence W. Wiley, chief chemist Atlantic & Gulf Portland Cement Co., advises Manufacturers Record as to additions, etc.; additions to cost about \$125,000 and give daily capacity of 2400 barrels; stone storage, capacity 5000 tons crushed limestone, will be equipped with belt conveyors and is nearing completion; present capacity clinker storage to be 50,000 barrels, with arrangements for 25,000-barrel extension; new machinery (mainly on ground) includes two rotary kilns and three installations of five grinding units. Of the two buildings under construction, 40x70-foot baghouse will be of steel and concrete, with walls of plaster on expanded metal; capacity 15,000 bags daily; laboratory, 20x45 feet; two stories; fireproof throughout; concrete walls and floors; second-story floor reinforced and supported on concrete beams, with matched wood floor on top; company will erect additional number of five-room cottages; all building and machinery contracts let; contemplates completing improvements by September 1. (Plant previously noted and described.)

Ga., Aragon.—Raid Mountain Portland Cement Co. contemplates erecting plant with daily output of 1000 barrels Portland cement; plan to increase in future to 5000 barrels; details of buildings, machinery, etc., have not been determined. Address care of J. L. Bass, Rome, Ga. (Lately reported incorporated with \$1,000,000 capital stock, etc.)

COTTON COMPRESSES AND GINS

Ark., Scranton.—A. P. Kincaid & Son awarded contract to McKee & Fischer Bros. for erection of cotton gin; two-story, 22x54-foot, and one-story, 14x24-foot buildings; mill construction; cost \$1000; cost of machinery, \$2250; daily capacity, 35 bales of cotton. (Recently noted.)

Tex., Brenham.—William Seidel will erect cotton gin to be operated by electricity; machinery ordered.

Tex., Mission.—Mission Farm Co., O. T. Gregory, president, is receiving bids on gin machinery, engine, boiler, etc., for plant recently mentioned; daily capacity, 80 bales.

COTTONSEED-OIL MILLS

Ala., Montgomery.—Southern Cotton Oil Co. will rebuild two seedhouses, hullhouse and fertilizer plant reported burned at loss of about \$75,000; reported that new buildings will be of brick or reinforced concrete.

Okla., Holdenville.—Farmers & Merchants' Cotton Oil Co. incorporated with \$30,000 capital stock by J. J. Armstrong, R. F. Jackson, R. M. McFarlin, C. C. Leach, C. L. Benson, T. T. Godfrey and L. T. Sammons.

S. C., Inman.—Inman Oil Mill has perfected organization, and is making arrangements to begin construction of plant; capital stock \$25,000; C. C. McMillin, president and treasurer. (Recently noted.)

S. C., Walterboro.—Walterboro Cotton Oil Co., J. B. Liles, president, contemplates installing additional machinery.

DRAINAGE AND IRRIGATION

Ark., Wilmot.—Board of Drainage Commissioners, W. E. Barnes, chairman, will let contract June 1 to dig drainage canal and laterals in Ashley county; about 700,000 cubic

yards; R. B. Eggeleston, engineer, England, Ark. (See "Machinery Wanted.")

Fla., Tallahassee.—Southern States Land & Timber Co. (Pearl Wright, president), Model Land Co., Florida East Coast Railway (J. E. Ingraham, vice-president, St. Augustine, Fla.) and R. J. Bolles are conferring with Governor and trustees of internal improvement fund in regard to construction of secondary canals previous to completion of 215 miles main canals; secondary canals are to be cut through rivers on east side of The Everglades directly into ocean; land companies agree to contribute \$5,000, Mr. Bolles \$25,000 and trustees \$25,000; this plan, if adopted, will change somewhat order of work on construction of main canals now being undertaken under contract awarded to Furst-Clark Construction Co., Fidelity Bldg., Baltimore, Md. (Contract for drainage of The Everglades was previously reported awarded to Furst-Clark Construction Co., contract approximating 25,000,000 cubic yards of work and amounting to about \$3,000,000.)

La., Abbeville.—Maronne Drainage District Commission awarded contract to Caesar Broussard, Gueydan, La., to construct drainage canal.

La., Adeline.—Cypremort Drainage Board will receive bids until April 15 for constructing canal; about 129,000 square yards; W. F. Giles, secretary. (See "Machinery Wanted.")

La., New Orleans.—New Orleans Netherlands Company organized by New Orleans and Chicago (Ill.) capitalists for reclamation of 5000 acres purchased in St. Charles parish, between Bayou des Allemands and Lake Ca-touche; property is being developed by construction of dykes and drainage canals, and will be divided into tracts and sold to Holland families who will be brought from Michigan; Cornelius J. Tom is president; William Brusse, vice-president, and D. W. Jelima, treasurer.

Tex., Del Rio.—D. B. Chapin, Chapin, Tex.; C. K. McDowell and Jones Pennington, Del Rio, Tex.; W. W. Collier, San Antonio, Tex., and others have organized company to construct dams across Pecos and Devil's rivers and utilize water for irrigation and power purposes; combined reservoirs, it is estimated, will contain about 3,000,000,000 cubic feet of water; power which it is proposed to generate is to be transmitted to San Antonio and other nearby cities; civil engineers have been engaged, who are now taking levels on both rivers.

ELECTRIC LIGHT AND POWER

Ga., Fairburn.—City has issued \$10,000 of bonds for construction of electric-light plant. Address The Mayor. (Previously mentioned.)

N. C., Durham.—Southern Power Co., Charlotte, N. C., purchased four acres on which to erect auxiliary steam plant for distribution of power in Durham and vicinity; station is to have capacity of about 10,000 horsepower. (Previously mentioned.)

N. C., Salisbury.—William J. Oliver of Knoxville, Tenn., and associates purchased control of Salisbury-Spencer Street Railway Co., with its properties and franchises, and the electric lighting and power systems of Salisbury, Spencer and Concord, and the gas plants and distributing systems at Salisbury and Spencer; purchase said to involve \$1,000,000; extensive improvements contemplated.

Tenn., Memphis.—City petitioned Legislature for authority to issue about \$1,000,000 of bonds for construction or purchase of electric-light plant; Heiskell Weatherford, City Engineer.

Tex., Alvin.—Alvin Ice, Light & Power Co. incorporated with \$15,000 capital stock by W. R. Stockwell, S. O. Smith, B. S. Williams and others.

Tex., Granbury.—Granbury Water, Light, Ice & Power Co. incorporated by R. Vickery and others. (See "Water-Works.")

Tex., Longview.—City will vote bond issue April 11 for erecting electric-light poles on business streets, about 50 to 40 feet apart. Address The Mayor.

Va., Williamsburg.—William and Mary College awarded contract to R. H. Richardson & Son, Hampton, Va., to erect proposed power-house; building to be of brick and cost \$5000; construction begun.

W. Va., Brandonville.—Pittsburg Hydro-Electric Co., F. W. Scheidehelm, engineer in charge, Connellsville, Pa., plans construction of water-power-electrical plant recently

noted as reported to be built by F. R. Garver (of Kingwood, W. Va.) and associates; not ready to announce details. (Company previously mentioned.)

FERTILIZER FACTORIES

Md., Baltimore.—D. B. Martin Company advises that new buildings will not be erected, as explosion only partially destroyed one building, which will be repaired. (Lately mentioned.)

Miss., Meridian.—Acidulating Plant.—A. H. George Company will be ready in fall with announcement of plans for proposed acidulating plant. (Recently noted.)

FLOUR, FEED AND MEAL MILLS

Mo., Kansas City.—United States Stock Food Co. will erect mill and warehouse; buildings will be one and five stories, 65x40 feet and cost \$20,000.

Mo., St. Joseph.—U. S. Grain, Flour & Feed Co. incorporated with \$20,000 capital stock by J. W. Kramer, Willis Kramer and J. E. Kramer.

Mo., Webb City.—Weaver Milling Co. incorporated with \$10,000 capital stock by C. B. Guinn, A. H. Gilson, C. A. Fisher and others.

Mo., Ozark.—Ozark Water Mills increased capital stock from \$25,000 to \$29,500.

W. Va., Charleston.—Brown Milling & Produce Co. takes over established and equipped plant of J. A. Carr Feed & Produce Co.; W. Frost Brown, president and manager; T. M. Anderson, vice-president, Petersburg, Va.; E. H. Mendenhall, secretary; Edward Calderwood, treasurer. (Recently reported incorporated with \$45,000 capital stock.)

FOUNDRY AND MACHINE PLANTS

Ala., Sheffield.—Plows and Harrows.—A. P. McKay contemplates, it is reported, establishment of plant to manufacture harrows and patented reversible plows.

Md., Baltimore.—Baltimore Gas Appliance & Manufacturing Co., H. W. Hunter, president, awarded contract to Fidelity Construction Co., 64 Knickerbocker Bldg., Baltimore, to remodel former gas plant at Bayard and Wicomico Sts., which it has leased to equip for manufacture of gas appliances; annual output will be 30,000 gas ranges, 15,000 gas heaters, etc.; offices at plant. (Company was reported in January as organized with \$300,000 capital stock, etc.)

Miss., Vicksburg.—Iron Foundry and Garage, R. J. Robinson has plans by William Stanton for iron foundry and garage combined; building will be combination brick and steel and cost about \$20,000; bids will soon be invited.

Mo., St. Louis.—Tire Machinery.—Near-Air Tire Co. incorporated with \$50,000 capital stock by Edward A. Hankey, William Wesley and Conrad H. Bothwell; to manufacture machinery used in treating tires and to manufacture compound called near-air, used as an air substitute in filling tires.

Mo., St. Louis.—Steel Bars, etc.—Company organized with \$351,000 capital stock by William E. Guy of St. Louis; Thomas R. Akin, Chicago, Ill., and others to establish rolling mill for manufacturing hard-steel bars, angles, channels, concrete reinforcing bars, etc.; plant will have capacity of 48,000 tons annually; Mr. Akin elected president.

Mo., St. Louis.—Motors, Engines, etc.—Brozelle Motor Co. incorporated with \$10,000 capital stock by Benjamin Brozelle, D. M. Houser, Charles H. McKee, Z. E. Hensen and John C. Porter.

Mo., St. Louis.—Engines, etc.—Fulton Iron Works will enlarge plant, doubling capacity; will purchase six acres in Wellston factory district.

N. C., High Point.—Cars.—Southern Car Co. has been reorganized by J. B. Duke, W. G. Brokaw of New York, Abraham Cook and R. W. Morrison; capital stock will be increased and plant enlarged; will manufacture electric cars.

N. C., High Point.—Car Works.—Southern Car Co. has reorganized and increased capital stock to \$200,000; J. Elwood Cox, J. B. Duke and others are interested.

S. C., Greenwood.—Iron.—D. K. and J. L. Gaffney, Gaffney, S. C., have organized Greenwood Iron Foundry and will establish plant for general foundry work.

Tenn., Nashville.—Stoves and Ranges.—Gray & Dudley Hardware Co., R. M. Dudley, president, increased capital stock to \$1,000,000 to develop general business and increase manufacturing capacity; now operates two stove and range foundries, and a saddlery and harness factory, all in Nashville.

Tex., El Paso.—Drills, etc.—Rock Drill & Machine Co., 18th and Blake Sts., Denver, Col., will conduct branch office at El Paso;

will not build plant. (Recently noted incorporated with \$50,000 capital stock.)

GAS AND OIL DEVELOPMENTS

La., Marksville.—L. A. Dider and James K. Lambert contemplate developing oil properties.

La., Vinton.—Hillside Petroleum Co. incorporated with \$25,000 capital stock; R. A. Reynolds, president and general manager; C. L. Smith, vice-president; J. T. Shelby, secretary-treasurer.

Mississippi.—Mineral Oil & Gas Co. contemplates development of about 5000 acres in Choctaw county. For information address T. H. Smith or H. P. Wyman, 417 Ouachita Ave., Hot Springs, Ark.

Okla., McAlester.—Bix Six Oil & Gas Co. incorporated with \$6000 capital stock by Robert F. Turner and R. S. Briggs of Indianola, and Harry T. Kyle of McAlester.

Okla., Mulhall.—Company has been organized with L. K. Meek, president; R. M. Kincaid, secretary, and J. J. Donhos, treasurer; will drill for oil and gas.

Okla., Muskogee.—Beenax Oil Co. incorporated with \$5000 capital stock by J. Garfield Buell, C. E. Buchanan and Ralph W. Leftwich.

Okla., Oklahoma City.—Oklahoma Oil & Barner Co. incorporated with \$125,000 capital stock by A. Morrison, H. A. Bump, W. F. Malone and H. A. Hodges of Oklahoma City, and J. T. Beam, Harrah, Okla.

Okla., Tulsa.—Princeton Oil & Gas Co. incorporated with \$10,000 capital stock by A. E. Watts, James E. Duffy and A. E. White.

Tex., Calvert.—Sandy Creek Oil & Development Co. incorporated with \$3550 capital stock by W. C. Taylor, G. K. Proctor, W. R. Vaughan and others.

Tex., Petrolia.—Wood River Oil Co. incorporated with \$10,000 capital stock by O. Groves, Claude Groves and W. H. Gardner.

W. Va., Marlinton.—Marlinton Oil & Gas Co. incorporated with \$25,000 capital stock by C. A. Yeager, W. J. Yeager, H. G. Baxter, G. W. Campbell and H. S. Geirhart.

ICE AND COLD-STORAGE PLANTS

Ky., Rochester.—Rochester Ice & Milling Co. incorporated with \$10,000 capital stock by Wallace M. Brown, J. P. Hays and William Whills.

Md., Pikesville.—Pikesville Dairy Co., 1501-1513 Argyle Ave., awarded contract to Alexander W. Brown, Kate Ave., near Garrison, Baltimore, to erect cold-storage warehouse at 1511-1513 Argyle Ave.; 24x33 feet; brick and stone; cost about \$2000; plans by Henry Adams, Calvert Bldg., Baltimore.

Mo., Chaffee.—Company has been organized with J. S. Wahl, president; William Pfefferkorn, vice-president; W. H. Brooks, secretary-treasurer, and D. C. Shoptaugh, manager; to construct ice plant.

N. C., Statesville.—R. A. Cooper and others are interested in contemplated erection of cold-storage plants in vicinity of Statesville. (See "Machinery Wanted.")

S. C., Camden.—P. M. Kennedy, Jr., manager of Camden Water, Light & Ice Co., contemplates erecting ice and cold-storage plant.

Tex., Alvin.—Alvin Ice, Light & Power Co. incorporated by W. R. Stockwell and others. (See "Electric Light and Power.")

Tex., Granbury.—Granbury Water, Light, Ice & Power Co. incorporated by R. Vickery and others. (See "Water-Works.")

Tex., Jasper.—Jasper Ice Co. has been organized with \$12,000 capital stock; John H. Seale, president; J. C. Ward, vice-president; H. R. Dean, secretary; A. P. Cooke, treasurer; will erect 60x60-foot building; ordinary construction; no contract; machinery purchased; daily capacity 20 tons of ice. (Recently noted.)

Va., Charlottesville.—Charlottesville Ice Co. increased capital stock from \$25,000 to \$50,000.

Va., Chase City.—T. G. Boswell reports that ice plant of five to eight tons capacity will be established; company not yet organized; will operate coal and wood yard in connection. (See "Machinery Wanted.")

W. Va., Berkeley Springs.—Morgan County Cold Storage Co., F. W. Bartlett, owner, Mannington, W. Va., has plans by David I. Davis, Chicago, Ill., for cold-storage plant; 66 feet 8 inches by 113 feet; four stories; fire-proof reinforced concrete interior; brick walls; cost \$30,000 to \$40,000.

LAND DEVELOPMENTS

Ala., Birmingham.—Marshall Land & Development Co. incorporated with \$5000 capital stock; H. L. Marshall, president and gen-

eral manager; Paul A. Savage, vice-president; J. S. Kennedy, secretary-treasurer.

Ark., Little Rock.—Factoria Land Co. purchased and will develop 750 acres; contemplates equipment with railroad facilities for factory sites, etc., and sale of five-acre tracts for truck farms; total expenditure about \$200,000; no engineer yet in charge; A. C. Read, president; M. W. Fleming, vice-president; W. D. Cammack, secretary; main office, Little Rock, care of Southern Trust Co. (Recently noted incorporated with \$100,000 capital stock.)

Fla., Geneva.—East Sanford Land Co., W. A. Whitcomb, principal, Bloomington, Ill., purchased 19,000 acres in Orange county and will develop, probably for residential and farming purposes; purchase price about \$142,000; property is bounded on three sides by Lakes Harney and Jessup and St. Johns River.

Fla., Jacksonville.—D. C. MacInnis of New York and associates purchased 20,000 acres in Duval and Nassau counties for colonization; consideration, about \$200,000; propose to incorporate company, probably under title of Jacksonville-Florida Farms Co. with \$200,000 capital stock; main office to be in New York and branch office in Jacksonville.

Fla., Knights.—Co-operative Homestead Co., A. B. Hawk, president, Tampa, Fla., will establish "Crystal Spring Colony" on site of 24,000 acres in Hillsboro and Pasco counties; road 90 feet wide will be built through property by both counties, and this will be main street; all other streets will be 66 feet wide; lake is to be cleared and improved.

Fla., Redland.—Fruit.—J. L. Billingsley, Miami, Fla., purchased 60 acres and will cultivate grape fruit, oranges, coconuts, etc.

Fla., Tampa.—Thomas Land Co. incorporated with \$25,000 capital stock; Peter O. Knight, president; Walter C. Thomas, vice-president, general manager, secretary and treasurer.

Fla., Tampa.—Belaton Florida Colonization & Development Co. incorporated with \$500,000 capital stock by W. H. Jackson of Tampa, Antonio Brany and Emerich W. Retteg, Alpha, N. J.; Marcus Brown of New York and others; will establish Hungarian colony to be known as Belaton, and proposes to cultivate guttapercha, mushrooms, etc., manufacture Hungarian specialties, artificial stone, soap and other articles, and develop farming.

Fla., Tampa.—North Tampa Land Co., C. E. Thomas, president, Chicago, Ill., purchased 20,000 acres in Hillsboro county and is having property surveyed into 10, 20 and 40-acre farms; purchase price about \$125,000; will locate townsite.

La., New Iberia.—Andrew and I. D. Stafford of New Orleans and G. P. Lane, Dallas, Tex., have approved plans for development as residential section of about 400 acres of land on Bayou Teche; improvements will include cement sidewalks, drainage, water-works, concrete columns, etc.

Md., McCoole.—Western Maryland Orchard Co., Silas Alden Condit, manager, will develop fruit orchard of about 500,000 trees; has planted 40,000 trees, principally peach and apple, and is constructing roads to property.

Miss., Bolivar County.—L. K. Salsbury, Isaac Reese, George H. Tucker, R. T. Fant and A. S. Buchanan of Memphis, Tenn., and Manchester (England) capitalists are reported as negotiating for 32,000 acres of land for \$2,000,000 with intention of developing by cotton cultivation; rumors state will expend \$1,000,000 during first year for improvements, fertilizing, steam plows, etc., for scientific production of cotton; 32,000 acres of land covered with hardwood timber.

Mo., Frohna.—Palisch Land Co. incorporated with \$21,000 capital stock by Charles J. Palisch, G. A. Palisch and Henry G. Palisch.

Mo., St. Louis.—Louis Cella will improve and develop old Delmar racetrack as residential section, expending, it is reported, about \$200,000; engineers have prepared plan to harness River des Peres and change its entire course, which is now diagonally across property; latter work is estimated to cost \$75,000.

Mo., Sedalia.—City voted issuance of \$60,000 of bonds to improve Liberty Park, suburb. Address The Mayor.

N. C., Charlotte.—Eastside Realty Co. incorporated with \$125,000 capital stock by C. G. McManaway, Luther Snyder, L. P. McKenzie, D. M. Aternathy and T. B. Long to develop suburb comprising about 100 acres; property is to be surveyed and platted, streets and sidewalks graded, etc.

N. C., Charlotte.—Gattis Realty Co. incorporated with \$125,000 capital stock by Thomas J. Gattis, Henry Hayman and Craig Davidson.

S. C., Georgetown.—Georgetown Farm Land & Homeseekers' Co. organized with \$150,000 capital stock and will develop 15,000 acres; W. D. Morgan is president; L. F. Rhem, vice-president; E. V. Emerson, secretary-treasurer.

Tenn., Chattanooga.—Chattanooga Land Co. incorporated with \$100,000 capital stock by W. R. Crabtree, W. D. Sutton, Samuel Strauss, W. P. Jenkins and others; will develop property east of Mission Ridge, dividing it into building sites, streets, etc.

Tenn., Memphis.—Plantation Land Co. incorporated with \$25,000 capital stock by H. P. Fuhrer, W. R. Neblett, F. H. Thurman and others.

Tenn., Memphis.—Plantation Land Co. incorporated with \$25,000 capital stock by H. P. Fuhrer, W. R. Neblett, F. H. Thurman and others.

Tenn., Wayne County.—S. W. Dandridge of S. W. Dandridge & Co., Charlotte, N. C., purchased 10,000 acres in Wayne county for about \$40,000 and will develop as residential section.

Tex., Houston.—W. J. Dermody Investment Co., Omaha, Neb., purchased 426 acres about nine miles west of city and 4000 acres north-east of city; both tracts to be subdivided into farms of about 10 acres each.

Tex., Marfa.—West Heights Development Co. incorporated with \$3000 capital stock by John Humphris, S. J. Hensley and R. B. Russell.

Tex., Houston.—Port Houston Land & Townsite Co. and J. A. Alderson have contracted for development of townsite for residence and factory purposes; under contract Mr. Alderson agrees to survey and divide property, comprising 850 acres on Buffalo Bayou, into city lots; company reserves right to retain 35 acres adjoining city slips, same to be surveyed and divided by Mr. Alderson, and also 20 acres for factory purposes. Port Houston Land & Townsite Co. agrees to expend \$225,650 of net proceeds of sales of lots for permanent improvements as follows: For electric lighting, water-works and sewerage system, \$160,650; for grading and shelling streets and for drainage, \$30,000; for bonds for electric car line, \$35,000.

Va., Smithfield.—Crawley Land Co. incorporated with \$25,000 capital stock; J. E. Crawley, president; W. J. Crawley, secretary-treasurer.

W. Va., Charleston.—Kanawha-Texas Company incorporated with \$500,000 capital stock by Grant P. Hall, L. C. Massey, S. P. Smith and others; will locate townsites on about 6000 acres in Texas.

W. Va., Hedgesville.—Paradise Orchards Co. incorporated with \$125,000 capital stock by Edgar C. Guinn of Hedgesville; Richard E. Cloughton (treasurer United States Trust Co.), 1465 G St. N. W., Washington, D. C., and others.

W. Va., Lambertton (postoffice at Ellenboro, W. Va.).—American Undercurrent Co. of Pittsburgh, Pa., and Pennsboro, W. Va., where H. L. Lambert, vice-president, is in charge, will build factory and town; has 700 acres for developing by paving streets, laying gas and water mains, constructing sewers, erecting dwellings, etc. (See "Miscellaneous Factories.")

W. Va., Williamson.—Burning Creek-Marrowsboro Land Co. incorporated with \$100,000 capital stock by John A. Sheppard and others. (See "Miscellaneous Factories.")

LUMBER MANUFACTURING

Ga., Rome.—Acme Lumber & Manufacturing Co., J. H. Taylor, president, will erect 80x100-foot mill-construction building. (Recently noted to rebuild burned plant.)

Ga., Boston.—Kirby Planing Mill Co. will erect sawmill.

Ga., Rome.—Acme Lumber & Manufacturing Co., J. H. Taylor, president, will erect 60x150-foot, 30x100-foot and 50x100-foot buildings to replace burned plant; ordinary construction; cost of machinery \$10,000; will manufacture moldings, finish, flooring, ceiling, sash and doors. (Recently noted.)

Ga., Savannah.—Floyd Neck Land & Lumber Co. incorporated by J. R. Paschall, W. C. Parker, Jr., and K. D. Steere.

Ky., Cleveland.—Clay's Ferry Sawmill Co. incorporated by Lee Smitha, T. B. Adams and Al Smitha.

Ky., Lexington.—American Timber & Coal Co., Cincinnati, O., telegraphs Manufacturers Record that company is developing 500,000 acres Kentucky and Tennessee coal and timber land; making coal leases and selling stumpage; has organized with \$5,000,000 capital stock; president, E. R. Buck; vice-president, George W. Platt; secretary, Wm. H.

Durham; treasurer, Thomas M. Stewart; general manager, George H. Black.

Ky., Richmond.—Allrite Coal & Lumber Co. chartered with \$500,000 capital stock by John E. Lynch, John C. Chenault and Joseph Chenault.

La., New Orleans.—Tremont Lumber Co. will rebuild on enlarged scale lumber plant recently reported burned at loss of about \$200,000.

La., Lake Providence.—American Forest Co., White Bldg., Buffalo, N. Y., states recent report it will build sawmill is not correct.

La., New Orleans.—Washington Cypress Lumber Co. incorporated with \$100,000 capital stock; E. Martin, president; F. C. Martin, vice-president; E. Martin, Jr., secretary-treasurer.

La., New Orleans.—Baton Rouge Veneer Co., R. H. McLeod, owner, Baton Rouge, La., will rebuild veneer plant (recently reported burned) in Hanson City, a suburb of New Orleans.

Miss., Hickory.—C. G. Weatherford will rebuild sawmill reported burned; cost \$3500; has purchased machinery; daily capacity, 20,000 feet of timber.

Miss., Tylertown.—Q. D. Sauls (recently noted to establish lumber manufacturing plant) will erect building of ordinary mill construction; cost \$3000 to \$5000; cost of machinery to be installed \$5000; daily capacity 25,000 to 40,000 feet of lumber. (See "Machinery Wanted.")

Miss., Minter City.—J. H. Allen & Co. organized with \$20,000 capital stock by T. Pearce, Pine Bluff, Ark., and others.

Mo., Downing.—Downing Lumber Co. incorporated with \$10,000 capital stock by C. P. Streeter, W. A. Barbee, John McWilliams and others.

N. C., Black Mountain.—S. Montgomery Smith, Asheville, N. C., telegraphs Manufacturers Record he has purchased 19,000 acres Yancey county timber land; sold spruce on 8000 acres at \$10 per 1000 feet in log delivered at mill to Charles Edgar, Evanston, Ill.; Mr. Edgar plans erection of band mill for daily capacity 75,000 feet lumber; Mr. Smith will sell 10,000 acres hardwood of tract to Asheville company now organizing; connected with these developments sash and door factory, hardwood flooring plant, stave mill and pulp and paper mill practically assured.

N. C., Canton.—Champion Lumber Co. chartered with \$5,000,000 capital stock; purchased and will develop over 100,000 acres Haywood county timber land; properties include Pigeon River Lumber Co. and 60,000 acres, Champion Fiber Co.'s Sunburst tract of 40,000 acres, Tennessee & North Carolina Railroad and Pigeon River Railroad Co.; will rebuild Pigeon River Lumber Co.'s mill at Crestmont, Tenn., and install additional machinery, increasing daily output to 175,000 feet of lumber; plans constructing in near future between Canton and Sunburst large mill for manufacturing hardwood lumber from timber on Sunburst tract; will extend railways, etc. President is R. F. Whitmer of Wm. Whitmer & Sons, Philadelphia, Pa.; general manager, J. Arbogast of Asheville, N. C. Others interested are J. B. Leach & Co. of New York, Clark L. Poole & Co. of Chicago, and Peter G. Thompson, president of Champion Fiber Co. of Canton.

Tenn., Crestmont.—Champion Lumber Co. will rebuild Pigeon River Lumber Co.'s mill and add machinery to increase daily capacity to 175,000 feet lumber. (See N. C., Canton.)

N. C., Roxboro.—Caltolina Land & Lumber Co. incorporated with \$50,000 capital stock by R. P. Early, D. W. Early, John R. McClure and others, all of Shelby, N. C.; purchased 1036 acres of timber land in Person county, estimated to contain 5,000,000 feet of lumber, will erect four or five sawmills and establish new town of Caltolina; land will also be improved for farming.

Okla., Atoka.—National Lumber & Manufacturing Co. (recently noted incorporated with \$10,000 capital stock) takes over assets of Atoka Lumber & Manufacturing Co.; makes bois d'arc products and ash staves; contemplates addition of handle machinery; Wm. Bassett, president; J. M. Humphreys, secretary. (See "Machinery Wanted.")

Okla., Wilburton.—Moore Hardware & Lumber Co. incorporated with \$20,000 capital stock by Claude O. Moore, Ross H. Moore and Earl M. Moore.

Tex., Houston.—Houston Lumber Co. incorporated with \$500,000 capital stock by Mrs. M. A. Upton, Mrs. C. O. Dubose and James Journeay.

Va., Lynchburg.—Lloyd Moore will erect planing mill at Turnpike and Main St.; machinery to be operated by electric motor.

Va., Prince William County.—S. E. Foster, Fredericksburg, Va., contemplates establishment of two sawmills on tract recently purchased in Prince William county; pine and oak timber.

MINING

Ga., Auraria.—Gold.—Eldorado Gold Mining Co. incorporated with \$500,000 capital stock by A. A. Lappe and Louis Werk, Pittsburg, Pa., and C. R. Sovey, Kansas City, Mo.

Mo., Joplin.—Gager Mining & Milling Co. incorporated with \$6000 capital stock by F. H. Gager, L. L. Gager and Nellie Gager, all of Joplin; S. L. Row, Clay City, Ind., and others.

Mo., St. Louis.—Phillipsburg Mining Co. incorporated with \$30,000 capital stock by L. M. Rumsey, H. S. Rumsey, M. Katany, A. L. Shapleigh and others.

N. C., Winston-Salem.—Granite.—Blue Pearl Granite Co. incorporated with \$250,000 capital stock by J. L. Wimblish and others.

Tex., San Saba.—Marble.—San Saba Marble Co. elected W. L. Swinney, Dallas, Tex., president; G. W. Brown, vice-president; J. H. Chambliss, secretary and manager; W. L. Steele, treasurer; Messrs. Brown, Chambliss and Steele are of West, Tex.; machinery includes channeling machines, derricks, saws, hoisting engines, etc. (Recently reported incorporated with \$50,000 capital stock.)

Va., Esmond.—Slate.—Albemarle Slate Corporation, Geo. Morris, president, Esmond, and 55 Liberty St., New York, will operate plant to have ultimate output of 500 squares per day; acreage about 457; will open bids for mining machinery April 15; proposals to be addressed to Geo. Blow, manager, Esmond; company was recently noted incorporated with \$2,500,000 capital stock. (See "Machinery Wanted.")

MISCELLANEOUS CONSTRUCTION

Fla., St. Petersburg.—City will vote May 9 on issuance of \$30,000 of bonds for purchasing and improving water-front property; W. F. Divine, City Clerk.

Fla., West Palm Beach.—Dock and Seawall. City will vote May 2 on issuance of \$32,000 of bonds for construction of dock and seawall; J. B. McGinley, Mayor. (Date of election postponed from March 21, as lately stated.)

Ky., Hickman.—Dock.—Mississippi Valley Transportation Co., New Bank of Commerce Bldg., St. Louis, Mo., will construct dock with steel or concrete shipping freight house; plans not determined.

La., New Orleans.—Levees.—Commissioners Tensas Basin Levee District, T. B. Gilbert, Jr., president, awarded contract to Lawrence Bros. & Co. at 20.82 cents per cubic yard for construction of Luca levee in Desha county, Arkansas, along right bank of Mississippi River, and extending for 7300 feet; work will require about 350,000 cubic yards of material; to Doullout & Williams to construct Cuslich Canal levee in Plaquemines parish, La., at 21.5 cents per cubic yard; will require about 8000 cubic yards material.

Tex., Galveston.—L. T. Gaylord, Houston, Tex., representing Atlantic, Gulf & Pacific Co. of New York, is lowest bidder at 6.7 cents per cubic yard, or \$281,400, for widening and deepening Galveston channel; bid was based on estimated yardage of 4,200,000 cubic yards; proposed work is dredging of channel to obtain projected dimensions of 1200 feet wide and 30 feet deep; present width, 500 feet; channel is to be widened for distance of about 8200 feet; for width of about 250 feet work will be dredging where present depths vary from 18 to 25 feet; balance of work will be new dredging, where present depth is about 4 feet; dredging is about 700,000 cubic yards and new work about 3,500,000 cubic yards, making total of 4,200,000 cubic yards; dredging will be carried to depth of 34 feet to provide for future shoaling, but new work will be dredged to depth of 3 feet below mean low water; dredging will be done first for entire distance, and then channel will be widened as far as funds available, about \$275,000, will permit; material to be removed consists of sand, mud and clay. G. P. Howell, Major, Engineers, has forwarded bids to Washington. (Recently mentioned.)

Tex., Laferia.—Laferia Mutual Canal Co. increased capital stock from \$8000 to \$253,320.

MISCELLANEOUS ENTERPRISES

Ala., Ensley.—Printing Plant.—Ensley Sun will enlarge and re-equip printing plant.

Ala., Mobile.—Grain Elevator.—J. Zimmermann's Company awarded contract to S. E. Dupree & Sons of Mobile to enlarge and re-

model building, 100x95 feet, at Monroe and Water Sts., which is to be equipped as grain elevator and warehouse; latter to have storage capacity of 75 carloads of grain.

Fla., Miami.—Dredging.—George F. Cook Lightering & Towing Co. incorporated with \$40,000 capital stock by L. G. Highleyman, St. Louis, Mo., and others.

Ala., Montgomery.—Distributing Plant.—The Texas Company, Houston, Tex., will establish branch plant; erect three frame buildings, costing about \$4000, to be 30x120, 34x45 and 24x48 feet, respectively; will also erect steel oil tanks; initial investment about \$15,000; J. C. McCullough is in charge of company's work in Montgomery.

Ga., Savannah.—Floyd's Neck Land & Timber Co. incorporated with \$25,000 capital stock by J. R. Paschall, W. C. Parker, Jr., and K. D. Skeere.

Ky., Louisville.—Cleaning and Dyeing.—Art Cleaners & Dyers incorporated with \$5000 capital stock by Ernest Leffler, Fred Leffler and Albert Leffler.

La., Shreveport.—Journal Publishing Co. incorporated with \$50,000 capital stock; A. J. Frantz, president; P. M. Welsh, vice-president; D. Attaway, secretary; L. O. Thomas, treasurer.

Miss., Jackson.—Immigration.—Central Immigration Co. organized with \$50,000 capital stock; will deal in farm and timber lands; A. H. Longino, president; William Simonon, general manager.

Md., Baltimore.—Printery.—Crouch & Lesser incorporated with \$5000 capital stock by Edwin Crouch (of Crouch-Lesser Company), 123 S. Charles St.; Maurice Lesser and Jacob F. Murbach.

Mo., Joplin.—Grain Elevator.—J. W. Boyd Grain Co. awarded contract to Pelkey Construction Co. for erection of grain elevator; wood covered with iron; cost, including machinery, \$9000. (Recently noted.)

Mo., Kansas City.—Engineering.—Curtis Engineering Co. incorporated with \$3000 capital stock by R. A. Curtis, C. H. Peterman and R. G. Bassington.

Mo., Kansas City.—Engineering.—Foote Engineering & Construction Co. incorporated with \$10,000 capital stock by H. B. Foote, Roy B. Pearce and C. G. Spencer.

Mo., St. Louis.—Publishing.—Central Literary Publishing Co. incorporated with \$2000 capital stock by Edward R. Schieferdecker, Arthur E. Mueller and J. H. Zumbalen.

N. C., Greensboro.—Greenhouse.—J. Van Lindley Nursery Co. will erect addition 300x42 feet to greenhouse, making entire structure 500x42 feet and covering 75,000 square feet of space; carload of glass will be required; construction begun.

N. C., Laurel Hill.—Machine Repairing, etc. Mercantile & Machine Co., J. T. Flythe, president (recently reported incorporated with \$10,000 capital stock), will deal in general merchandise and automobiles, and do machine repairing; will erect 30x50-foot brick and wood structure; R. Morrison, manager. (See "Machinery Wanted.")

N. C., Raleigh.—Printery.—Biblical Recorder Co., Cary J. Hunter, president, will erect newspaper plant; building will be three stories, 45x100 feet; brick with stone trimmings; cost \$15,000.

Okla., Carnegie.—Publishing.—Carnegie Publishing Co. incorporated with \$5000 capital stock by James H. Cunningham, Clyde C. Leech, Paul Nesbitt and J. Lee Wilson.

Okla., Holdenville.—Hardware and Furniture.—Coleman Hardware & Furniture Co. incorporated with \$10,000 capital stock by Clark Nichols, J. L. Kelley and others.

Tex., Beaumont.—Heating and Plumbing.—Krimmel Plumbing & Heating Co. incorporated with \$3000 capital stock by K. D. Bishop, Victor H. Hexter and Arthur L. Kramer.

Tex., Corsicana.—Printing.—Corsicana Printing Co. incorporated with \$5000 capital stock by James Garitty, D. N. Rice and W. V. Crockett.

Tex., Galveston.—Marine Ways and Drydocks.—Gulf Fisheries Co., J. W. Munn, president, Pier 22, leased property on Pelican Spit and will construct 300-ton marine railway with transfer cradle; also shipyard; total expenditure about \$20,000; contract awarded to H. J. Crandall & Son Company, East Boston, Mass.

Tex., Greenville.—Amusement Park.—Dayton Construction Co. will establish amusement park; has 10 acres of ground about two miles north of Greenville; will erect theater, bowling alleys, dance hall, skating rink, rest room, band stand, merry-go-rounds, etc.; cost \$15,000; A. B. Coryell is manager.

Tex., Houston.—Laundry.—Model Laundry

Co. incorporated with \$100,000 capital stock by Gus Dreyling, J. W. Lockett and others.

Okla., Oklahoma City.—Live Stock.—Union Live Stock Co. incorporated with \$30,000 capital stock by S. A. Newland of Ardmore, Okla.; Charles B. Daniels and Carl D. Fryer of Texline, Tex.

Okla., Oklahoma City.—Dye Works.—New York Star Dye Works incorporated with \$5000 capital stock by Albert J. Bozalla, Alice Lyat Bozalla and Fannie Dubois.

Tenn., Memphis.—Park.—City petitioned Legislature for authority to issue \$300,000 park bonds; Heskell Weatherford, City Engineer.

Tex., Caracubua.—Ranch.—Ward Cattle & Pasture Co. incorporated with \$1,200,000 capital stock by Russell E. Ward, B. Q. Ward and Reiffert Ward; has 250,000-acre ranch with 51,437 head of cattle, mules and horses.

Tex., Fort Worth.—Printing.—Reimer-Exline Printing Co. is name of company recently reported organized with \$300,000 capital stock to consolidate Reimers Company of Fort Worth and M. P. Exline Company, Dallas, Tex.; purchased site for \$50,000 and will erect plant 200x300 feet.

Tex., Houston.—Pleasure Resort.—George M. Jenks and Clark Cox will expend \$30,000 in improvements to pleasure resort; will construct 1000 feet of scenic railway, 150x150-foot theaterium and 50x100-foot pavilion; plans and construction by Mr. Cox. (Recently noted to establish pleasure resort at Magnolia Park.)

Tex., San Antonio.—Publishing.—Light Publishing Co. incorporated with \$100,000 capital stock by G. D. Robbins, H. L. Steele and Marcus W. Davis.

Tex., Sutherland Springs.—Mineral Water.—Hygen Mineral Water Co. incorporated with \$30,000 capital stock by W. E. and H. R. Nelson, San Antonio, Tex., and Judson Hume, Sutherland Springs.

Tex., Waco.—Printing.—E. W. Marshall and B. L. Scott will expend \$10,000 to erect printery; 50x100 feet; ordinary construction. (Recently noted under "Miscellaneous Factories.")

Va., Harrisonburg.—Printery.—Harrisonburg Printing Corporation incorporated with \$20,000 capital stock; M. M. Jarman, president, Elton, W. Va.; W. W. Logan, vice-president, Woodstock, Va.; Samuel Paul, secretary, Harrisonburg.

Va., Norton.—Steam Laundry.—F. B. Kline reported to establish steam laundry.

Va., Petersburg.—Publishing.—Index-Appel Publishing Co., Walter Edward Harris, president (recently reported incorporated with \$75,000 capital stock), will publish Index-Appel and Evening Record; will install 20-horse-power steam engine and generator.

Va., Troutdale.—Publishing.—Troutdale Publishing Co. incorporated with \$2500 capital stock; M. A. Hoffman, president, Grant, Va.; G. E. Parks, secretary, and J. F. Greear, treasurer, both of Troutdale.

W. Va., Benwood.—Crematory.—City Council awarded contract to Dixon Engineering Co., Toledo, O., at \$5000 for crematory plant; incinerator to have capacity of 12 tons of garbage daily.

W. Va., Clarksburg.—Garage.—Monticello Automobile & Garage Co. incorporated with \$100,000 capital stock by D. W. Jacobs, C. E. Prunty, Arthur Parsons and others.

W. Va., Hinton.—Contracting.—W. Mason Construction Co. incorporated with \$10,000 capital stock by W. Mason, J. P. Wilkinson, Joseph Hinton and others.

MISCELLANEOUS FACTORIES

Ala., Bessemer.—Implements.—International Harvester Co., Chicago, Ill., telegraphs that recent report it will erect plant is not correct.

Ala., Birmingham.—Macaroni.—Alabama Macaroni Co. increased capital stock from \$30,000 to \$50,000.

Ala., Calais.—Lime.—Calais Lime & Stone Co., W. C. Shackelford, president, 1030 National Bank Bldg., Birmingham, Ala., will operate lime works; present contemplated improvements include repairing limekilns, dwelling-houses, etc.; daily capacity, 300 barrels of lime; W. C. Shackelford and Frank Stollenwerk recently noted to have purchased Calais Lime Works. (See "Machinery Wanted.")

Ala., Mobile.—Mattresses.—Perfection Mattress Co., Birmingham, Ala., will establish branch plant.

Ark., Berryville.—Brooms.—E. Leach Canning Co. will install machinery and operate broom factory; E. Leach recently noted interested. (See "Machinery Wanted.")

Fla., Jacksonville.—Bed Appliances.—Extra Cover Holder Bed Co. incorporated with \$100,

600 capital stock; A. K. Williams, president; Arthur T. Williams, vice-president; B. J. Butts, secretary; C. C. Bettes, treasurer.

Ga., Atlanta.—Automobile Trucks.—De Loach Manufacturing Co., 1112 Candler Bldg., has organized with A. A. De Loach president, J. K. De Loach vice-president and secretary, V. J. Adams treasurer; will add tractor truck manufacturing to established line of De Loach mill machinery; capitalization, \$250,000. (Recently noted.)

Ga., Buford—Tannery.—Bona Allen, Inc., Bona Allen, president, advises Manufacturers Record that building recently noted is but part of plan to rebuild tannery complete; the building now being erected is 75x250 feet, four stories, mill construction, and will replace present structure; present machinery will probably be used. (See "Machinery Wanted.")

Ga., Columbus—Candy, etc.—Sugar Valley Plantation Co. incorporated with \$15,000 capital stock, and privilege of increasing to \$100,000, by P. J. Williams, J. J. Williams and others; proposes to grow sugar-cane, refine syrups, manufacture candy, etc.

Ga., Douglasville—Lace Cabinets.—Krom Lace Cabinet Co., J. T. Duncan, president, will increase capital stock from \$9000 to \$10,000; erect additional building and double capacity of plant.

Ga., Jasper—Monuments, etc.—Jasper Monumental Works, J. W. Howell, president (recently noted organized to manufacture marble and granite monuments, etc.), will erect building of ordinary construction and install machinery; plans not determined.

Ga., Savannah—Wood Distillery.—Chatham Manufacturing Co. incorporated with \$10,000 capital stock by B. L. Fitch, M. E. Fitch and J. F. Bailey.

Ky., Covington—Screens.—Easy Adjusted Screen Co. incorporated with \$15,000 capital stock by Harry F. Hittlinger, John J. Ennis and H. J. Lezchy.

Ky., Louisville—Tobacco.—C. E. Ziegler Tobacco Co., Eddy St. (between 16th and 17th Sts.) incorporated with \$150,000 capital stock by W. D. Collins and others; will continue established plant and is considering plans for erection of factory (on present site) costing about \$25,000.

Ky., Marion—Valves.—Shrode Valve Co. incorporated with \$100,000 capital stock by John L. Shrode, F. W. Nunn, T. H. Cochran, C. S. Nunn and J. W. Blue, Jr.

Ky., Owensboro—Candy.—Vick-Miller Candy Co. increased capital stock from \$20,000 to \$40,000.

Ky., Paducah—Gloves.—Shinn Glove Co. increased capital stock from \$35,000 to \$50,000.

Ky., Pineville—Bakery.—Pineville Bakery Co. incorporated by W. T. Davis, George C. Davis, Boyd Davis and C. C. Davis.

Ky., Salvisa—Brooms.—Mercer Canning & Manufacturing Co., W. K. Tevis, president, will manufacture brooms. (See "Canning and Packing Plants.")

Ky., Sturgis—Barges.—West Kentucky Coal Co., W. H. Cunningham, manager, Paducah, Ky., will rebuild barge plant recently reported burned; mill construction; cost \$3000; construction by company; cost of machinery \$4000. (See "Machinery Wanted.")

La., Delcambre—Sugar.—Delcambre Sugar Co. will not make any additions to mill as recently reported.

La., New Orleans—Brooms.—William Stienroth, proprietor of Southern Home Broom Co., Natchez, Miss., contemplates establishing \$100,000 broom factory at New Orleans or Shreveport, La.

La., New Orleans—Campbell Paint Co. incorporated with \$10,000 capital stock; Edwin A. McKoy, president; Arthur B. Hunt, vice-president; John A. Taylor, secretary-treasurer.

La., New Orleans—Biplanes.—C. R. Miller of New Orleans, C. F. Charlifs, Houston, Tex., and associates will establish biplane factory and school.

La., Shreveport—Glass.—August Bolonger Penna will, it is reported, erect glass factory.

Md., Baltimore—Overalls.—Baltimore Overall Manufacturing Co., 40 S. Howard St., incorporated with \$25,000 capital stock; D. Pelzer, president; M. Willenzig, treasurer; daily capacity, 200 dozens.

Md., Creagerstown, R. F. D. from Rocky Bridge—Glue, Ink, etc.—P. A. Hann & Co. will rebuild burned factory for glue, ink, etc.

Mo., Hannibal—Brewery.—Hannibal Brewing Co. increased capital stock from \$25,000 to \$100,000.

Mo., Kansas City—Monuments.—Kansas City Granite & Monument Co., 1904 Grand Ave., has organized with A. W. Smith, president; T. S. Reed, secretary-treasurer; has

building and machinery. (Recently reported incorporated with \$25,000 capital stock.)

Mo., Kansas City—Drinking Device.—Thornton Sanitary Drinking Device Co. has organized with Dr. C. W. Thornton, president; W. A. Snell, vice-president; W. R. Montgomery, secretary; J. L. Williams, treasurer; will have drinking device manufactured by contract, which has not been let. (Recently reported incorporated with \$50,000 capital stock.)

Mo., Kansas City—Wheels.—Standard Spring Wheel Co. incorporated with \$100,000 capital stock by Chas. F. Underhill, Theo J. Blackendorf and Harry W. McNutt.

Mo., Kansas City—Mailing Machines.—Automatic Mailing Machine Co. has organized with W. C. Renfro, president; F. R. S. Dittmars, vice-president and manager; L. A. Robertson, secretary-treasurer; will manufacture machines by contract. (Recently reported incorporated with \$100,000 capital stock.)

Mo., Kansas City—Scales.—Kansas City Scales Co. incorporated with \$10,000 capital stock by F. M. Cockrell, R. I. Merrill, E. J. Spencer and others.

Mo., St. Joseph—Emerick Specialty Manufacturing Co. incorporated with \$3000 capital stock by C. F. Emerick, C. A. Battreall and Joseph L. Davison.

Mo., St. Louis—Medicines.—E. C. Grallagher Medicine Co. incorporated with \$100,000 capital stock by A. Sumner Haight, M. E. Buske, J. M. Griffith and others.

Mo., St. Louis—Medicines.—American Medicine Co. incorporated with \$20,000 capital stock by Joseph Jaque, Beverly R. Deems and Charles J. Anderson.

Mo., St. Louis—Heating Apparatus.—D. & T. Manufacturing Co. incorporated with \$30,000 capital stock by John M. Dougherty, Harry C. Tabler, George E. Miller, James W. Gul and others.

Mo., St. Louis—Clothing.—American Guaranty Garment Co. incorporated with \$10,000 capital stock by Albert Maescher, George W. Westerkamp, A. C. Bush and others.

N. C., Henderson—Phosphoric Acid.—Vance Guano Co. will construct acidulating plant for manufacture of phosphoric acid; cost of building, \$20,000.

N. C., Winston-Salem—Tobacco.—J. G. Flynt Tobacco Co. incorporated with \$100,000 capital stock; has elected J. G. Flynt, president; R. W. Gorrell, vice-president; J. P. Fulton, secretary-treasurer; will manufacture tobacco; daily capacity 1000 pounds.

Okla., Oklahoma City—Electric Controller. Electric Controller Co. incorporated with \$100,000 capital stock by C. O. Allen and W. M. Bowles of Shawnee, Okla.; Milton Bryan, J. M. Postelle and Abner Davis of Oklahoma City.

Okla., Pawhuska—Gasoline Refinery.—Auto-Gasoline Refining Co. incorporated with \$10,000 capital stock by Sam P. Nicholson, H. C. Lette and A. J. Vaughn, Muskogee, Okla.

Okla., Tulsa—Glass.—Blum Art Glass Co., Louisville, Ky., will establish plant for manufacturing beaded-glass windows and art and ornamental glass for decorative purposes.

S. C., Columbia—Gas.—Columbia Gas Light Co. increased capital stock from \$100,000 to \$300,000.

S. C., Greenwood—Typewriters.—G. H. Bruder and J. A. Bell, Harrisburg, Pa., are considering establishment of typewriter factory; propose organizing company with \$300,000 capital stock.

Tenn., Memphis—Candy.—Novelty Candy Co. will install additional machinery, which will increase annual capacity from 3,000,000 to 7,500,000 pounds.

Tenn., Memphis—Washing Compound.—Rublesco Manufacturing Co., 106 N. Front St., is name of company to establish plant to manufacture washing compound; has building and equipment; R. M. Austin (recently noted interested) is manager.

Tenn., Nashville—Saddlery, etc.—Gray & Dudley Hardware Co., R. M. Dudley, president, increased capital stock to \$1,000,000; will develop and increase manufacturing departments, including saddlery and harness factory; recently noted under "Miscellaneous Enterprises." (See "Foundry and Machine Plants.")

Tex., Fort Worth—Glass Works.—Fort Worth Glass Works, J. R. Walkup, 203 E. Day St., proprietor, contemplates erection of two-story brick building, 50x70 feet.

Tex., San Antonio—San Antonio Vito Zone Co. incorporated with \$10,000 capital stock by Z. C. Angevine, W. W. Pughen and J. V. Rogers.

Tex., Temple.—P. L. Downs and associates contemplates construction of gas plant to cost \$100,000.

Va., Alexandria—Bakery.—Lawman Bakery incorporated with \$25,000 capital stock; William Lawman, president, 6th and A Sts. N. E.; Harry Bosley, vice-president; C. R. Luce, treasurer; C. C. Weeks, secretary, all of Washington, D. C.

Va., Richmond—Lubricators.—Success Novelty Co., 618 Cary St., will operate plant with daily capacity of 50 force-feed lubricators; will occupy three-story erected building and install metal-manufacturing machinery; T. M. House, president and manager; George Green, vice-president; James Egan Kennedy, secretary-treasurer; was recently noted incorporated with \$10,000 capital stock. (See "Machinery Wanted.")

W. Va., Glen Ferris—Alloy.—Electro-Metallurgical Co. will rebuild plant reported burned at loss of about \$125,000; brick building will be erected; company manufactures alloy used for hardening steel.

W. Va., Lambert, P. O. at Ellenboro, W. Va.—Subservice Electric System.—American Undercurrent Co. of Pittsburgh, Pa., and Pennsboro, W. Va., where H. L. Lambert, vice-president, is in charge, will build factory and town; has 700 acres for development by paving streets, laying gas and water mains, constructing sewers, erecting dwellings, etc.; will erect plant on 15 acres, costing several hundred thousand dollars, to manufacture subservice system of electric traction; details not determined.

W. Va., Williamson—Carbon Black.—Burning Creek-Marrowsbone Land Co. incorporated with \$100,000 capital stock by John A. Sheppard, Wells Goodykoontz, Harry Scherr and others to manufacture carbon black and drill for oil and gas.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

La., Shreveport.—Kansas City Southern Railway, J. A. L. Waddell, construction engineer, Kansas City, Mo., will, it is reported, erect general repair shop.

Va., Newport News.—Chesapeake & Ohio Railway, F. L. Cabell, chief engineer maintenance of way, Richmond, Va., will rebuild machine, blacksmith and woodworking shops reported burned at loss of about \$20,000.

ROAD AND STREET WORK

Fla., Brooksville.—Town will vote April 25 on \$2000 bond issue for constructing sidewalks and \$7000 for paving streets; W. A. Thaxton, Town Clerk. (Recently noted.)

Fla., Jasper.—Hamilton County Commissioners, recently noted to receive bids April 3 for grading 30 miles road, will consider making this road hard; material not decided; probably clay; J. B. Wetherington, Clerk Circuit Court. (See "Machinery Wanted.")

Fla., St. Petersburg.—City will vote May 2 on issuance of \$5000 of bonds for construction of cross-walks; W. F. Devine, City Clerk.

Fla., West Palm Beach.—City will vote May 2 on issuance of \$12,000 of bonds for street improvements; J. B. McGinley, Mayor. (Date of election postponed from March 21, as lately stated.)

Ga., Nashville.—Berrien County Commissioners awarded contract to H. E. Warwick, Adel, Ga., to construct graded road, 30 feet wide, from Adel south to Lowndes county line.

Ga., Rome.—W. M. Gammon, chairman Board of Commissioners Roads and Revenues Floyd county, states that proposed road from Rome to Chattanooga will be graded macadamized road with concrete steel bridges and concrete culverts; will connect with Government road running through Chickamauga Park to Lafayette; construction by convict labor; Floyd county also contemplates completing road to Polk county and another to Bartow this summer.

Ky., Bowling Green.—Southside Realty Co. awarded contract to Preston & Ennis for laying 14,000 square feet of concrete sidewalks on both sides of Magnolia Ave.

Ky., Louisville.—Board of Public Works awarded following contracts for construction of vitrified-block streets and alleys: G. W. Gosnell, Wilson, from 15th to 18th, and 28th, from Walnut to Cedar; Jefferson County Construction Co., three alleys between Rosewood and Beechwood and Baxter Ave. and Bardstown Rd.; alley south of Woodbine, between Brook and Floyd; alley between 7th and 8th and Breckenridge and Florence; alley between 21st and 22d and Bank and Lytle.

Ky., Pineville.—City will construct 15 blocks 8-foot concrete sidewalk on Pine St. and Kentucky Ave., also 5 blocks in West Pineville; is now paving three miles streets

with asphalt binder, and contemplates letting contract for building road to be called "Cumberland Boulevard"; estimated expenditure for improvements, \$25,000; N. R. Patterson, Mayor.

La., Winnfield.—Winn parish contemplates road improvements; \$50,000 will be available. Address Police Jury.

Md., Denton.—Talbot and Caroline County Commissioners awarded contract to York Bridge Co., York, Pa., at \$28,968.22, for grading and macadamizing .83 mile of Dover Bridge Rd., and for construction of 70-foot steel drawbridge over Choptank River; Jos. B. Harrington, clerk to Talbot County Commissioners, Easton, Md.; William H. Anderson, clerk to Caroline County Commissioners, Denton, Md.

Md., Easton.—City will issue \$35,000 of bonds for street improvements; to include 26,000 square yards of street paving and 2000 to 3000 linear feet of curbing; material not determined; engineer not selected; amount available \$65,000; William E. Shannahan, president Street Improvement Commission.

Miss., Grenada.—City will construct 75,000 to 150,000 feet granolithic sidewalk; specifications on file at office of L. B. James, City Recorder; bids asked. (See "Machinery Wanted.")

N. C., Linville.—Company has been incorporated to construct graded macadam road from Linville to Alta Pass, distance of 22 miles, and then continue from Alta Pass to Gillespie's Gap, connecting with graded road to Switzerland; also contemplates to extend road to Asheville; Joseph Hyde Pratt, Chapel Hill, N. C., is principal promoter.

N. C., Murphy.—Murphy Township Highway Commission contemplates construction of about 30 miles macadam road, and will award contracts as rapidly as possible; now offering \$50,000 of bonds; total amount of issuance to be \$150,000 to \$200,000; W. H. Woodbury, chairman. (Recently noted.)

N. C., Salisbury.—Boone Township petitioned Rowan County Commissioners to order election to vote on bond issue for macadamizing roads.

N. C., Sanford.—Legislature authorized Commissioners of Lee county to order election to vote on issuance of \$100,000 of bonds for road improvements.

Okla., Oklahoma City.—City will grade Avenue C, Avenue D, Avenue E, Avenue F, Elder and Catalpa Aves., etc.; bids received until April 10; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will construct various sidewalks; bids received until April 11; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Ponca.—City will construct three blocks of brick paving and eight blocks of macadam; bids received until April 5; A. W. Farris, City Clerk. (See "Machinery Wanted.")

Tenn., Cocke County.—Mann Construction Co., Empire Bldg., Knoxville, Tenn., has contract for surfacing, grading and macadamizing 25 miles of county roads.

Tenn., Dresden.—Weakley County Commissioners awarded contracts for construction of roads in 22 county districts; E. W. Muzzall, John Brooks and Grooms & Co. are principal contractors.

Tenn., Knoxville County.—Mann Construction Co., Empire Bldg., Knoxville, Tenn., has contract for rebuilding 10 miles of county pike.

Tenn., McMinn County.—Mann Construction Co., Empire Bldg., Knoxville, Tenn., has contract for completing grade work on 25 miles of county roads; 24 feet wide, with 50 per cent. of concrete drainage.

Tenn., Memphis.—F. D. Harvey, 11 S. 2d St., Memphis, states paying contract recently not-d awarded to him amounts to \$30,000 for tar macadam limestone top on five-inch concrete foundation, and \$18,000 for limestone top, limestone foundation, curb and gutter on each street; J. H. Weatherford, City Engineer. Mr. Harvey is one of several contractors recently noted as receiving contracts. (See "Machinery Wanted.")

Tex., Austin.—City will pave 4th, 5th, 6th, 7th and other streets; total distance, 45,700 square yards; estimated cost, \$109,000; bids received until April 15; G. S. Iredell, City Engineer; F. W. Powell, superintendent of streets and public improvements. (See "Machinery Wanted.")

Tex., Dallas.—City Commissioners awarded contract to Texas Bitulithic Co. of Dallas at \$2.30 per square yard for paving South Blvd. from Ervay to Holmes St. with bitulithic on concrete foundation; cost \$357,500, of which city's part is \$1336.50; also to Texas Bitulithic Co. at \$2.30 per square yard for paving First Ave. from Parry to Santa Fe with bitulithic on concrete foundation; cost

\$4570.97, of which city's part will be \$2606.41; to Crescent Wood Block Paving Co. at \$2.59 per square yard for paving Bryan St. from Pacific to Joseph with wood blocks; total cost will be \$74,917.30. J. B. Winslett, City Secretary, was instructed to advertise for bids for grading and filling on Bishop Ave. between Zang's Blvd. and 12th St.; City Engineer estimates for roadway 8910 cubic yards of cut and 2654 yards of fill, and for sidewalks, 6129 cubic yards of cut and 3761 yards of fill.

Tex., Farmersville.—City's plans for street improvements include concrete gutters, street crossings and culverts; amount available, \$10,000; J. P. Huddleston, Mayor. (Recently noted to vote \$10,000 for street improvements.)

Tex., Fort Worth.—McFarland-Neff Concrete Construction Co. has been awarded contract by Dr. Creagen and Mr. Frank for one mile concrete sidewalk; also one mile for City Park Board.

Tex., Granger.—Justice Precinct No. 2 of Williamson county voted issuance of \$100,000 of bonds for road construction. Address Precinct Commissioners.

Tex., Greenville.—City will construct 148,600 square yards paving and 84,000 linear feet concrete curb; bids received until April 11; W. A. Fraser, City Clerk; E. L. Dalton, consulting engineer, Dallas, Tex. (See "Machinery Wanted.")

Tex., Houston.—Bering Tire & Rubber Co., 511 Travis St., will construct two-mile speedway; dirt track, elliptical, with turns well banked; location probably between Houston and Harrisburg (suburb); to be completed soon.

Tex., Liberty.—Liberty County Commissioners have been petitioned to order election for May 16 for voting on issuance of \$250,000 of bonds for road improvements; work will embrace about 90 miles of roadway.

Tex., Lockhart.—Road Precinct No. 1 of Caldwell county voted issuance of \$50,000 of bonds for road construction. Address County Commissioners. (Recently mentioned.)

Tex., Longview.—City will vote bond issue April 11 for paving streets in business section. Address The Mayor.

Tex., Memphis.—Precinct No. 1 of Hall county voted issuance of \$25,000 of bonds for road construction. Address County Commissioners. (Recently mentioned.)

Tex., Sweetwater.—City awarded contract to A. J. Roy, Sweetwater, for 14 blocks of macadam and asphalt paving; work will begin within 30 days. (Recently noted.)

Tex., Texas City.—Galveston county awarded contract to Suderman & Dolson, Galveston, Tex., at \$17,410 for grading, regrading, paving with mud shell, building of culverts, etc., on road from La Marque to Texas City, distance of 4½ miles; John M. Murch, County Auditor. (Recently noted.)

Va., Chase City.—City awarded contract to macadamize Main and Fifth Sts. to depot. Address The Mayor.

Va., Fairfax.—Fairfax County Good Roads Association contemplates rebuilding 20 miles of Leesburg turnpike, forming direct route from Washington to Leesburg; estimated cost, \$100,000.

Va., Farmville.—City let contract to Atlantic Bitulithic Co., Mutual Bldg., Richmond, Va., for paving recently noted awarded; price \$14,300.

Va., Norfolk.—City will construct cement concrete roadways on Martin's La. and Hall St., east of Yorkmouth; about 1100 square yards; W. T. Brooke, City Engineer. (See "Machinery Wanted.")

Va., Norfolk.—W. T. Brooke, City Engineer, submitted to Public Improvement Committee estimate of cost of improving Manteo St. from Fairfax to Pembroke Ave., Fairfax Ave. from Manteo to Dundaff St., and Pembroke Ave. from public school to within 100 feet of Dundaff St., as follows: 1200 feet of curbing, \$744; 4400 square yards asphalt, \$8800, and sewer connections, \$150; total \$9694.

Va., Norfolk.—American Boulevard Corporation awarded contracts to J. N. Adenbrooks Sons, Norfolk, for granolithic sidewalks and to E. F. Mitchell for grading in Lockaven; Arthur C. Freeman, engineer in charge.

Va., Portsmouth.—Street committee and Sixth Ward Local Improvement Board will arrange for contemplated improvement of High St.; work will probably be under supervision of Bascom Sykes, engineer.

Va., Pulaski.—Pulaski Road District has \$70,000 available for permanent road improvement; work to begin within 60 days and to be done by "local road authorities"; J. N. Borong, clerk.

W. Va., Barboursville.—Town Council is considering paying of streets. Address Town Clerk.

W. Va., Williamson.—City will grade, pave and curb First, Third, Fourth and Fifth Aves., Pritchard, Dickinson, Harvey, Logan and Vinson Sts.; paving will amount to about 16,000 yards and curbing to about 11,000 linear feet; bids received until April 10; N. H. Manakee, City Engineer, First National Bank Bldg. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Mobile.—Board of Public Works accepted plans submitted by Wright Smith, City Engineer, for improvement of sewerage and drainage systems at cost of about \$600,000.

Ark., Hazen.—City will construct sewer system; contract awarded. Address The Mayor.

Fla., Jacksonville.—City awarded contract to F. W. Long & Co., Jacksonville, for construction of Hollowman St. and Highway Ave. storm sewers; reinforced concrete pipe furnished by Reinforced Concrete Culvert Pipe Co. of Jacksonville; R. N. Ellis, city superintendent.

Fla., Pensacola.—City will construct 15,000 linear feet storm-water drains from 66 to 10 inches in diameter and 23,880 linear feet of sanitary sewers from 24 to 6 inches in diameter; bids received until May 2; John A. Merritt, chairman bond trustees; George Roman, Jr., engineer. (See "Machinery Wanted.")

Fla., St. Petersburg.—City will construct sewer system No. 17; bids received until April 13; W. F. Divine, City Clerk. (See "Machinery Wanted.")

Fla., West Palm Beach.—City will vote May 2 on issuance of \$16,000 of bonds for extension of sewer system; J. B. McGinley, Mayor. (Date postponed from March 21, as lately stated.)

Ga., Summerville (Richmond County), P. O. Augusta.—City voted issue of \$30,000 of bonds for extending sewerage and water systems; Alfred Cuthbert, intendant. (Recently mentioned.)

Ga., Thomaston.—City will vote May 1 on issuance of \$45,000 of bonds for construction of sewerage system and water-works. Address The Mayor.

Ky., Lexington.—City awarded contract to Central Construction Co., Lexington, for construction of 4x½-foot storm-water sewer; to be horseshoe in shape and 320 feet long; work to be completed by May 1.

Ky., Lexington.—City will construct eight-inch sanitary sewer beginning at manhole of High St. sewer and extending south along Rose, to near Grosvenor Ave.; bids opened April 5; John Skain, Mayor, Hernando Bldg.

La., New Orleans.—Sewerage and Water Board contemplates total expenditure of \$5,500,000 from 1912 to 1916, inclusive, including \$5,500,000 for construction of drainage, \$950,000 for construction of additional sewers, \$200,000 for extension of water system and \$1,550,000 for connections to water mains and sewers to property line and water meters; \$7,000,000 of improvement bonds have been issued; W. J. Hardee, City Engineer.

La., Opelousas.—City has elected E. B. Duboisson, A. J. Bercler and others as Board of Sewerage Commissioners; will arrange for construction of sewer system. (Previously mentioned.)

Miss., Cleveland.—Albert M. Alexander, civil engineer, and W. A. Chabonne, contracting plumber, will submit plans for construction of sewer system; estimated cost, \$12,000.

Mo., Kansas City.—Board of Public Works awarded contract at \$100 to Johnson Real Estate & Contracting Co., represented by A. D. Johnson, to construct sewer extending along north side of Brush Creek from Lydia to Prospect Ave.

Okla., Altus.—City awarded contract to Terry Construction Co., Poteau, Okla., for completing ditching, about four miles, for sewer and water systems.

Okla., Chickasha.—City will receive bids until April 10 for construction of lateral sewer No. 52 in Sewer District No. 25; also until April 10 for construction of lateral sewers in Sewer District No. 26; Joseph Dews, City Clerk. (See "Machinery, etc., Wanted.")

Okla., Tulsa.—T. C. Hughes, City Engineer, will have plans ready in about 35 days for trunk line sanitary-sewer system on east side of city; cost \$35,000.

S. C., Columbia.—City will construct circular concrete storm-water drain and appurtenances on Gervais St., between Assembly and Pulaski Sts.; total length, 2600 linear feet; sizes, 36, 42 and 48 inches inside diameter; bids received until April 11; John McNeal, City Engineer. (See "Machinery Wanted.")

Tex., Longview.—City will vote bond issue

April 11 for purchasing sewer system. Address The Mayor.

W. Va., Barboursville.—Town Council is considering construction of sewer system. Address Town Clerk.

TELEPHONE SYSTEMS

Ala., Hazel Green, R. F. D. from New Market.—Hazel Green Telephone Co. organized with W. S. McCowan president and H. A. Bobo secretary-treasurer; equipment purchased.

Ky., Brown's Grove.—The Mayflower Telephone Co. incorporated with \$2000 capital stock by J. W. Byrd, W. I. Irvan, I. T. Crawford and F. M. Pea.

Ky., Carrollton.—Carrollton Telephone Exchange Co. increased capital stock from \$5000 to \$25,000.

Va., Cambria.—Virginia & Tennessee Telephone Co., N. C. Watts, president, has applied for franchise to construct telephone system; will connect with Christiansburg, Va.; has exchange; work by company's force; main office, Roanoke, Va.

Ky., Claypool.—Claypool Telephone Co. has arranged for and made purchases; will operate 20-mile line. (Recently noted incorporated with \$1800 capital stock by J. M. Willoughby and others; direction of line also previously noted.)

Ky., Wiswell, R. F. D. from Murray.—Harris Grove & Murray Independent Telephone Co. incorporated by M. B. Guthrie, J. F. Key, J. B. Boyd, J. O. Key and O. C. Barnes.

S. C., Townville.—Townville Telephone Co. organized; E. C. Asbell, president and treasurer; John N. Bleckley, vice-president; is constructing telephone system from Townville to Anderson, S. C.

Okla., Chelsen.—Riggs Chapel Rural Telephone Co. incorporated with \$2500 capital stock by William Sutherland, W. J. Strang, I. L. Russell and others.

Okla., Kingfisher.—Wandell Telephone Co. incorporated by J. L. Faxon, J. A. Caylor, C. C. Wells and others.

S. C., Gray Court.—Gray Court Telephone Co. incorporated with \$1500 capital stock by J. N. Leak, F. D. Bolt, G. F. Dorron and R. L. Gray; plant purchased; F. D. Bott, secretary and treasurer.

Tex., Tyler.—Gulf States Telephone Co., Dover, Del., proposes to construct and operate telephone system through East Texas and extending into McLennan county; Texas main offices at Tyler.

Va., Danville.—Pittsylvania-Caswell Telephone Co. incorporated with \$3000 capital stock; J. F. Travis, president; J. M. Hodges, vice-president; J. W. Fuqua, secretary.

Va., Danville.—Pittsylvania-Caswell Telephone Co. incorporated with \$3000 capital stock; J. F. Travis, president; J. H. Hodges, vice-president; J. W. Fuqua, secretary.

W. Va., Amos.—Amos Telephone Co. incorporated with \$5000 capital stock by S. R. Miller, W. S. Swiger, Clark Jones and others.

TEXTILE MILLS

Ala., Anniston-Hosiery.—United Hosiery Mills organized with authorized capital stock of \$100,000; has 65x110-foot brick building; will install 65 knitting machines; has equipment; Samuel C. Mead, president; L. V. Moore, secretary. (This is plant mentioned last week.)

Ga., Lagrange.—Cotton Cloth.—Dunson Mills awarded contract to Pike Bros. Lumber Co., Lagrange, to erect main building, of brick, 132x572 feet, two stories, with one story weave shed, costing about \$96,000; will install 20,000 spindles, 400 to 500 looms, steam-power plant, etc.; equip 1200 horse-power steam plant, costing about \$26,000; erect 100 cottages for operatives; all machinery contracts awarded and amount to about \$300,000; president, J. E. Dunson; secretary-treasurer, T. J. Thornton; architect-engineer in charge, J. E. Sirrine of Greenville, S. C. (Company's organization with \$500,000 capital stock and plan heretofore stated.)

N. C., Morganton-Hosiery.—R. B. Moore and T. L. Sigman plan organization of \$15,000 stock company to install hosiery knitting machinery.

N. C., Statesville.—Sheeting, etc.—Statesville Cotton Mills will add 3000 spindles, with carding machinery; has awarded contracts.

S. C., Calhoun Falls—Print Cloth.—Calhoun Mills expects, it is rumored, to increase to 40,000 spindles in future; now has 25,000 ring spindles, 600 broad looms, etc., driven by electric power.

S. C., Greer.—Sheeting.—Greer Manufacturing Co. will increase capital stock from \$200,000 to \$350,000; now has 10,240 ring spindles, 280 broad looms, etc.

S. C., Spartanburg—Bag Goods.—Union Cotton Bagging Corporation, Norfolk, Va., will establish branch. (See "Textile Mills.")

Tenn., Springfield.—Woolen Blankets.—Springfield Woolen Mill Co. will erect additional building costing \$2500; awarded contract to E. T. Lewis & Co., Nashville, Tenn.

Tex., Cuero.—Sheeting, Duck, etc.—Gaudalupe Valley Cotton Mills is name of Cuero cotton factory under reorganization; will expend \$50,000 for improvements; erect 60x100-foot addition to main buildings and build additional warehouse and opening-room; purchased picker, carding and spinning machinery to increase daily capacity to about 5000 pounds; adding 2000 spindles; award building contracts in April; overhaul old machinery; equipment will be 8000 spindles, 160 looms, etc. (Lately mentioned.)

Tex., San Angelo.—Woolen Goods.—Chamber of Commerce, Thor F. Owen, secretary, is not prepared to announce names and addresses of parties contemplating establishment of woolen mill lately mentioned; plant will probably cost \$150,000.

Va., Norfolk—Bag Goods.—Union Cotton Bagging Corporation chartered with \$300,000 capital stock and acquired Margolis Company; will continue Norfolk plant and establish branch at Spartanburg, S. C.; probably install additional picker, garnetting and mixing machinery; president, R. Margolis of Norfolk; vice-president, Lawrence S. Holt, Jr., of Burlington, N. C.; secretary-treasurer, J. Harper Erwin of Durham, N. C. (See "Machinery Wanted.")

WATER-WORKS

Ala., Ashville.—Town is considering construction of water-works. Address Town Clerk.

Ala., Fayette.—City is considering construction of water-works. Address The Mayor.

Ala., Greenville.—City voted issuance of \$15,000 of bonds for purchase of duplicate parts for pumping station of municipal water-works and to pay interest on city's bonded indebtedness. Address The Mayor.

Fla., Fort Dade.—Government will extend water-works; receive bids until April 29. Address Constructing Quartermaster. (See "Machinery Wanted.")

Ga., Fairburn.—City has issued \$20,000 of bonds for construction of water-works. Address The Mayor. (Previously mentioned.)

Ga., Summerville (Richmond County), P. O. Augusta.—City voted issuance of \$30,000 for extending water-works and sewerage system; Alfred Cuthbert, intendant. (Recently mentioned.)

Ga., Thomaston.—City will vote May 1 on issuance of \$45,000 of bonds for construction of water-works and sewerage system. Address The Mayor.

La., New Orleans.—Sewerage and Water Board contemplates expending \$200,000 for extension of water system and \$1,850,000 for connections to water mains and sewers to property line and water meters; W. J. Hardee, City Engineer. (See "Sewer Construction.")

Md., Baltimore.—Board of Awards, J. Barry Mahool, president, will receive bids until April 26 for furnishing, delivering and erecting, complete, 30,000-gallon vertical triple-expansion pumping engine, two batteries of two boilers each, the necessary steam-piping between engines and boilers, etc., (recently noted) for Mt. Royal Pumping Station, according to specifications by Water Engineer, Alfred M. Quick. (See "Machinery Wanted.")

Md., Cumberland.—City will vote May 16 on issuance of \$500,000 of bonds for new water supply; J. H. Fuertes, engineer, of New York, prepared plan which was adopted by City Council calling for gravity supply from Evitts Creek, about nine miles from city; water is to be filtered in open reservoir; daily supply 6,000,000 gallons. (Recently mentioned.)

Miss., Seminary.—City voted issuance of \$10,000 of bonds for construction of water-works and completion of school building. Address The Mayor.

N. C., Murphy.—City is completing arrangements for construction of proposed water-works; \$25,000 of bonds have been issued. Address The Mayor.

Okla., Ada.—City will receive bids until April 10 for extension and improvement of water-works; \$150,000 bond issue recently reported; Goodwin & Harper, 920 Scarritt Bldg., Kansas City, Mo., are consulting engineers; W. B. Jones, City Clerk. (See "Machinery Wanted.")

Okla., Altus.—City awarded contract to Terry Construction Co., Poteau, Okla., for completing ditching, about four miles, for water and sewer systems.

Okl., Fairfax.—City awarded contract to J. B. Davidson, 435 Lee Bldg., Oklahoma City, Okla., for construction of water-works; E. T. Archer & Co., Beals Bldg., Kansas City, Mo., are engineers.

Okl., Oklahoma City.—City has plans and specifications for new sedimentation basin, 200 feet long, 100 feet wide and 12 feet deep, which will increase capacity of present purification plant at water-works by about 5,000,000 gallons daily; Vincent Shinkle, superintendent of water-works.

Okl., Sapulpa.—City has engaged Burns & McDonnell, Dwight Bldg., Kansas City, Mo., as engineers in charge of constructing proposed water-works; plans being prepared; bids will be invited in April; estimated cost, \$250,000.

Okl., Stillwater.—Citizens' Water Co. incorporated with \$10,000 capital stock by J. L. Bishop, M. W. J. Holt, Sam Miller, J. W. Thatcher and H. B. Bullen.

S. C., Columbia.—City will construct water mains with appurtenances on Gervais St. from Main to Huger St.; bids received until April 11; F. C. Wyse, engineer-superintendent. (See "Machinery Wanted.")

Tex., Granbury.—Granbury Water, Light, Ice & Power Co. incorporated with \$30,000 capital stock by R. Vickery, W. T. Pittman and James W. Rockaday.

Tenn., Dayton.—City will vote on issuance of \$25,000 of bonds for construction of water-works; K. M. Benson, Mayor.

Tex., Sherman.—Superintendent of water-works will receive bids until May 8 on equipment and machinery for water-works recently noted; specifications on file at office of Barney C. Krenger, City Secretary. (See "Machinery Wanted.")

Tenn., Sparta.—J. A. Wilson purchased Sparta Water Co.; will extend and improve system.

Tex., Alvin.—City Council granted franchise to T. P. Majors and W. C. Hunt to construct water-works.

Tex., Olney.—City's water system will comprise 2000 feet of 8-inch and 3500 feet of 6-inch mains, fireplugs, well, pump, boiler, pumping station and tower 100 feet high; M. P. McCutchen, Mayor. (Bond issue of \$10,000 recently reported voted.)

W. Va., Barboursville.—Town Council granted franchise to D. A. Allen for construction of water-works.

W. Va., Romney.—City voted issuance of bonds for construction of water-works; amount \$15,000; reservoir will be established at Mechanicsburg Gap; A. N. McKeever, Mayor.

W. Va., Wheeling.—City Council voted to increase amount of bond issue for construction of filtration plant from \$200,000, as lately stated, to \$300,000; C. B. Cooke, City Engineer.

WOODWORKING PLANTS

Ark., Prescott.—Staves and Heading.—Prescott Stave & Heading Co. (not incorporated), Geo. A. Hosmer, manager, will establish stave and heading factory; machinery purchased; building to be erected by Mr. Hosmer; Harry Gund interested. (Gund Brewing Co. recently incorrectly noted to establish this plant.)

Ky., Henderson.—Wagons.—Henderson Wagon Works (recently noted incorporated with \$30,000 capital stock) is reorganization of Coquillard Wagon Works; manufactures farm wagons, trucks and drays.

La., Pollockville.—Handles, Spokes, etc.—Pollockville Spoke & Handle Co. incorporated with \$25,000 capital stock by J. H. Simmons, H. A. Chadwick, J. H. Bell and others.

Miss., Jackson.—Seating, etc.—Capital Manufacturing Co. has purchased N. A. Price School Seating Factory and will continue to manufacture seating, school furniture, bank fixtures, etc. (Recently reported incorporated with \$30,000 capital stock by J. M. Hatfield and A. H. Longino.)

N. C., Hickory.—School Desks.—Ivey & Hice Company has reorganized as Ivey Manufacturing Co. by George F. Ivey, W. H. Nicholson and others; will continue to manufacture picker sticks and lug straps in addition to school desks.

N. C., Forest City.—Buggies.—J. E. McFarland contemplates establishment of plant to manufacture buggies. (See "Machinery Wanted.")

N. C., Thomasville.—Kitchen Furniture.—Lambeth Furniture Co., J. W. Lambeth, manager, awarded contract to Lindsay Mayers, Thomasville, for rebuilding plant recently reported burned; two and three stories; 50x150 feet; ordinary construction; sprinkler system; will open bids for machinery April

6; cost \$12,000 to \$15,000. (See "Machinery Wanted.")

Okl., Atoka.—Handles.—National Lumber & Manufacturing Co., Wm. Bassett, president, contemplates installation of handle machinery. (See "Lumber Manufacturing" and "Machinery Wanted.")

Tex., Fort Worth.—Wagons.—Fort Worth Wagon Factory, recently reported incorporated with \$150,000 capital stock by Warren Heaton, Neosho, Mo., and others, has begun erection of plant on Fostepo Heights; main building will be 70x350 feet, stockroom 70x75 feet, warehouse 70x200 feet, two-story dry-kiln 25x100 feet, paint shop 75x150 feet, and boiler and engine room 40x50 feet; initial capacity will be 5000 wagons annually, which will later be increased to 10,000 wagons annually; machinery purchased; no contracts.

Tex., San Antonio.—Furniture.—H. L. Brenzinger contemplates, it is reported, establishment of furniture factory.

Va., Briery.—Spools, etc.—Joseph L. Pearson & Son, Keysville, Va., will, it is reported, establish saw and planing mill in Briery and install equipment for manufacturing spools and bobbins.

Va., Richmond.—Fulton Woodworking Co. incorporated with \$15,000 capital stock; P. L. Conquest, Jr., president; N. W. Hubbard, treasurer, both of Richmond; L. T. W. Marye, secretary, Ashland, Va.

W. Va., Huntington.—Sash, etc.—Huntington Sash, Door & Trim Co. incorporated with \$75,000 capital stock by C. L. Ritter, W. F. Kahler, J. W. Lawton and others.

BURNED

Ala., Birmingham.—T. A. Darden's residence.

Ala., Fayette.—Following losses are additional to those recently reported: Robertson & Dodds, \$100,000; W. M. Cannon, \$30,000; Smith, Dodson & Co., \$12,000; Walker Bros. & Co., \$10,000; S. J. Cannon, \$10,000; F. A. Nichols & Co., \$6000; Bensley & Wright, \$4500; Odd Fellows' Lodge, \$3000; Dr. J. A. Branyan, \$7000; W. A. Anderson, \$2000; R. T. Hamner, \$4000; Miss E. Shepherd, \$5000.

Ala., Gadsden.—J. L. Echols' residence.

Ala., Gadsden.—W. D. Pinkard residence on S. 4th St., owned by Mrs. F. W. Bellenberger; loss \$3000.

Ala., Hartford.—James Lommons' residence; loss \$3000.

Ala., Montgomery.—Southern Cotton Oil Co.'s 22 seedhouses, hullhouse and fertilizer plant; loss \$75,000 to \$100,000.

Ark., Fayetteville.—Bates Ruebell's grocery store, loss \$4000; McAdams Drug Co.'s building, loss \$6000; Falls Bros. store, loss \$3000.

Ark., Pine Bluff.—Leo M. Andrews' stable, etc.; loss about \$18,000.

D. C., Washington.—Geo. W. Robinson's warehouse in rear of H. I. 2d and 3d Sts. S. W.; loss \$3500; building at 1329 F St. N. W., owned by Virginia Miller and Annie G. Murray; loss \$5000.

Fla., Jacksonville.—Blue Ridge Distillery Co.'s plant; estimated loss \$20,000.

Fla., Palatka.—Wilson Cypress Co.'s plant.

Fla., Pensacola.—J. D. Waters' residence at 18th St. and Fourteenth Ave.

Fla., Tampa.—Y. F. O'Halloran & Co.'s cigar factory; loss \$5000.

Fla., Tampa.—State Fair Association's grandstand and sheds at West Tampa race-track; loss \$50,000.

Ga., Athens.—C. B. Griffith's residence; loss \$10,000 to \$12,000.

Ga., Canton.—Georgia Marble Finishing Works; loss about \$100,000.

Ga., Clem.—W. A. Aderhold's office; J. J. Highway & Sons' store.

Ga., Jackson.—Chas. L. Maddox' residence in Iron Springs district.

Ga., Macon.—Residences of Oscar W. Hayes, Geo. Wing, Jr., and J. B. Whitehead; loss \$30,000.

Ga., Thomaston.—Murray Hotel, owned by J. P. Murray, loss \$10,000; A. C. Adams' residence, owned by R. E. Hightower, loss \$3000.

Ga., Washington.—L. L. Le Roy's residence; loss \$3500.

Ga., Willacoochee.—Georgia Southern & Florida Railway's depot; W. C. Shaw, chief engineer, Macon, Ga.

Ky., Homer.—J. W. Stewart's residence.

Ky., Hopkinsville.—Benevolent Protective Order of Elks' building; loss \$20,000.

Ky., Moscow.—Moscow Roller Mills, owned by W. S. Burnett; loss \$10,000.

Ky., Middlesboro.—Dr. Edward Wilson's residence; G. W. Elliott's store and residence; A. J. Asher's barn and office building damaged; loss \$15,000.

Ky., Paducah.—J. A. Christian & Co.'s store; loss \$20,000.

Ky., Paducah.—Stave factory owned by Edwin Farley, State Treasurer, Frankfort, Ky.; loss about \$10,000.

Ky., Princeton.—Blake & King's store building; loss \$12,000.

La., New Orleans.—Philip Bemmerrite's store and residence; loss on store, about \$4000.

La., Opelousas.—Lacombe Hotel.

La., Patterson.—F. B. Williams Cypress Co.'s plant; reported loss, \$5000.

La., Pollock.—James Walker & Son's store, loss \$4500; Willett Bros.' store, loss \$7500; Van Eaton Hotel; Masonic Temple; Clinton Mercantile Co.'s building; Pollock News Co.'s office; J. M. Bonnettee's residence and office; Louis Ball's two residences; A. L. Honeycutt's dwelling and business building, etc.

Md., Baltimore.—Building at Sharp and Pratt Sts., owned by H. Knafely & Sons, 5 E. Pratt St.; occupied by Hopkins Tailoring Co. and Meyer Witgenstein & Co.; loss \$15,000 to \$20,000.

Md., Baltimore.—Stable building at Carroll Park; loss about \$6500; J. Barry Mahool, Mayor.

Md., Corbett.—Edward Triplett's barn, granary and silo; loss \$10,000.

Md., Emmittsburg.—Emmittsburg Broom Co.'s factory; loss \$4000 to \$5000.

Md., Federalburg.—Harry M. Carroll's residence; loss \$5000.

Md., Hagerstown.—Henry Canby's barn, dwelling, etc.

Miss., Forest.—Forest Gin & Manufacturing Co.'s seedhouse.

Miss., Hickory.—C. G. Weatherford's saw-mill.

Miss., Natchez.—Rabbi S. G. Bottigheimer's residence; loss \$3500.

Miss., Vicksburg.—Henry Stout residence, occupied by Thos. Mackey; loss about \$10,000.

Miss., Vicksburg.—Lake House.

Mo., Moberly.—J. W. Ingram's grocery store; William Magnus' store; Mayflower Hall; C. W. Magnus' sanitarium; total loss, \$65,000.

N. C., Biscoe.—Biscoe Foundry & Machine Co.'s shops; estimated loss \$10,000.

N. C., Granite Falls.—Teague & Cline's store; postoffice; W. C. Starnes' printery; Bowman & Starnes' store; loss \$10,000.

Okl., Lawton.—Crites Broom Co.'s factory; estimated loss, \$5000.

Okl., Kelleyville.—Russell Hotel, etc.; loss \$30,000.

Okl., Sapulpa.—E. L. Newport's pressing establishment; loss \$20,000.

S. C., Bishopville.—Wm. M. Reid's residence; loss \$4000.

S. C., Edgefield.—W. E. Outz's residence.

S. C., Fairfax.—W. E. Harter's warehouse; loss several thousand dollars.

S. C., Kershaw.—Cash Nelson's residence.

N. C., Scotland Neck.—Graded school building; loss about \$10,000. Address The Mayor.

S. C., Foreston.—J. H. Roswell's building; loss \$3500.

Tenn., Etowah.—Samuel Steed's residence.

Tenn., Nashville.—Gillette Grain Co.'s grain elevator and warehouse; estimated loss, \$20,000.

Tex., Cleburne.—Farmers' Union Warehouse; loss \$7000.

Tex., Fort Worth.—Gus Riddleman estate's building; loss \$8000.

Tex., Jacksonville.—Jacksonville Steam Laundry; loss \$3000.

Tenn., Jellico.—I. Glickman's store building; loss \$5000.

Tenn., Memphis.—A. D. Gibson & Sons' furniture store; loss \$7000.

Tenn., Waverly.—R. P. Rogers' residence; loss \$4000.

Tex., Caldwell.—G. W. Lee's residence; loss \$4000.

Tex., Center.—J. C. Rogers' drug store.

Tex., Knox City.—C. J. Gooding's store, owned by Farmers' State Bank; West Texas Supply Co.'s building, loss \$25,000.

Tex., Megargel.—H. R. David building, owned by Joe J. Cross.

Tex., Paducah.—J. A. Christian & Co.'s hardware store and Masonic Temple, loss \$25,000; J. T. Rutledge's grocery store, loss \$10,000; Goodwin Hotel damaged.

Tex., Van Alstyne.—E. E. Boyd's stable; Major & Berry's blacksmith shop; Major & McBride's corn mill.

Va., Newport News.—Chesapeake & Ohio Railway's machine, blacksmith and wood-working shops; estimated loss, \$20,000; F. I. Cabell, chief engineer maintenance of way, Richmond, Va.

Va., Norton.—Norton Steam Laundry, not Norton Bakery as recently incorrectly reported.

Va., Richmond.—Kentucky Tobacco Co.'s warehouse; loss \$10,000.

Va., Staunton.—Rev. R. A. Gibson of Richmond, Va., states his buildings were not destroyed by fire. (Recent report incorrect.)

W. Va., Glen Ferris.—Electro Metallurgical Co.'s alloy plant; estimated loss, \$150,000.

W. Va., Herndon.—Keys-Fannin Lumber Co.'s planing mill; loss about \$8000.

BUILDING NEWS BUILDINGS PROPOSED

APARTMENT-HOUSES

Ala., Gadsden.—T. S. Kyle is reported to erect apartment-house; brick; about 200-foot frontage; cost \$18,000 to \$20,000.

Fla., Tampa.—Mrs. C. C. Whitaker has plans by Shaw & Lerner, Tampa, for proposed apartment-house, and will receive bids for erection; two stories; frame; finished in stained cypress; site 40x65 feet.

Ky., Louisville.—Oscar Stutz, Jr., 102 W. Market St., will erect brick apartment-house; cost \$4500; plans by A. R. Smith, Louisville.

Md., Baltimore.—New Era Realty & Construction Co., Whitelock St. and Brookfield Ave., will erect double apartment-house on Whitelock St. near Brookfield Ave.; 72x72 feet; fireproof construction; electric lights; hot-water heat; cost about \$30,000; plans by Louis Levi, American Bldg., Baltimore.

Mo., Kansas City.—T. C. Mitchell will erect two brick apartment-houses; cost \$20,000.

Mo., Kansas City.—J. H. Howell will erect brick apartment-house; cost \$15,000.

Mo., St. Louis.—E. L. Wagner Construction Co. will erect three-story apartment-house; cost \$20,000.

Tex., Houston.—J. J. Sweeney will erect apartment-house; two stories; brick; cost \$25,000.

W. Va., Martinsburg.—E. F. Millard will remodel building on North Queen St. for stores and apartments; cost \$5000.

ASSOCIATION AND FRATERNAL

Ga., Waycross.—Waycross Nest of Owls plans to erect building.

Mo., St. Louis.—Benevolent Protective Or-

der of Elks, St. Louis Lodge, No. 9, will erect addition to auditorium; cost \$15,000.

N. C., Raleigh.—Agricultural and Mechanical College plans to erect Young Men's Christian Association building.

N. C., Raleigh.—Young Men's Christian Association completed fund and will erect proposed building to cost about \$75,000; Dr. Hubert Royster, chairman of building committee. (Recently to have opened campaign to raise this fund.)

Okl., Boley.—E. T. Barbour, secretary Masonic Temple Commission of St. John's Grand Lodge, Ancient Free and Accepted Masons, El Reno, Okla., will receive bids until 1 P. M. April 27 to erect Masonic grand temple for colored Masons at Boley; certified check for 5 per cent. amount of bid, payable to above commission; plans and specifications at offices of following: T. H. Traylor, 14 W. California Ave., basement, Oklahoma City, Okla.; W. H. Twine, Twine Bldg., Muskogee, Okla.; E. O. Tyler, Haynes Bldg., Boley; C. A. Buchanan, Safeguard Office, Guthrie, Okla.; H. C. Price, 161 D Ave., Lawton, Okla.; D. W. Lewis, attorney-at-law, Kingfisher, Okla.

Tex., Fort Worth.—Young Men's Christian Association inaugurated campaign to raise \$12,000 to improve and furnish building.

Va., Roanoke.—Young Men's Christian Association contemplates erection of building; cost not less than \$100,000.

BANK AND OFFICE

Ala., Mobile.—Equitable Life Association is reported to erect office building; not less than 10 stories; cost about \$250,000.

Fla., St. Petersburg.—First National Bank will enlarge building.

Fla., Tampa.—Citizens' Bank & Trust Co. is having plans prepared by Francis J. Kennard, Tampa, for bank and office building; 8 or 10 stories; steel skeleton; at least 150 offices.

Fla., Tampa.—H. C. Giddens and T. C. Tallafiero will receive bids to erect three additional stories to Giddens Building; certified check for \$500, payable to owners; plans and specifications at office of Francis J. Kennard, architect, Tampa, or may be had on deposit of \$25.

Fla., Tampa.—I. S. Giddens and L. L. Buchanan will receive bids to erect two additional stories to American National Bank Building; certified check for \$500, payable to owners; plans and specifications at office of Francis J. Kennard, architect, Tampa, or may be had on deposit of \$25. (Recently noted.)

Ga., Macon.—Claud Estes will erect office building; eight stories; cost \$175,000.

Ga., Milner.—Farmers' Bank organized with L. O. Benton, president, Monticello, Ga.; will erect bank building.

La., New Orleans.—Mergenthaler Linotype Co. has plans by Diboll, Owen & Goldstein, Perrin Bldg., New Orleans, for reinforced concrete fireproof building; five stories; 40x130 feet; brick veneer; terra-cotta trimmings and cornice; steam heat; bids opened; to be completed by September 1.

N. C., Hickory.—Dr. E. R. Russell, Asheville, N. C., will erect office building.

N. C., Raleigh.—Berry O'Kelly will erect office building; three stories.

Okla., Muskogee.—A. Y. Allen will erect five-story office building.

S. C., Anderson.—W. L. Brissey will erect office building and showrooms.

Tex., Longview.—First National Bank awarded contract to erect bank building; four stories; brick. (Recently noted.)

Tex., New Braunfels.—New Braunfels State Bank will receive bids until noon April 12 for erection of two-story bank building.

Tex., Palacios.—Palacios State Bank, H. B. Harwell, president, contemplates erection of bank building. (Recently noted.)

Va., Manassas.—W. N. Lipscomb will rebuild office and store building recently reported burned; cost \$10,000. (See "Stores.")

Va., Norfolk.—Talbot estate will erect store and office building.

Va., Richmond.—Main Street Bank, V. Hechler, chairman, will erect 40-foot addition to brick bank building; cost \$526.

Va., Richmond.—Richmond Beneficial Insurance Co. will erect three-story brick office building; cost \$15,000.

W. Va., Charleston.—Bowen Realty Co. will erect office and business block.

W. Va., Falling Springs.—Bank of Renick will open bids April 11 for erection of bank building recently noted; 24x40 feet; one story; brick and pressed brick; cost \$3500; plans by S. E. Pace, Covington, Va. (See "Machinery Wanted.")

CHURCHES

Ark., Warren.—First Presbyterian Church, Rev. J. F. Lawson, pastor, has not selected architect to prepare plans for edifice; probably pressed brick; steam or hot-air heat; electric lighting; concrete sidewalks; cost \$15,000. (Recently noted.)

Fla., St. Petersburg.—Congregational Church, Rev. N. Matthews, pastor, is having plans prepared by Edgar Ferndon, architect, St. Petersburg, for edifice; 80x90 feet; two entrances; auditorium 60x50 feet; seating capacity 500; chapel 32x40 feet; primary classroom 16x26 feet; artificial stone backed with brick; memorial and stained-glass windows; four towers; cost about \$20,000. (Recently noted to erect edifice.)

Fla., St. Petersburg.—Lutheran congregation will erect edifice. Address The Pastor, Lutheran Church.

Fla., Tampa.—Rev. W. F. Murray of Louisville, Ky., and Rev. J. M. Moore of Nashville, Tenn., are interested in erection of edifice.

Ky., Elkton.—Methodist Episcopal Church, Rev. R. B. Grider, pastor, will open bids about May 15 to erect edifice recently noted; Grecian architecture; 52x64 feet; ordinary construction; steam heat; electric lighting; concrete walks; cost \$14,000; plans by Clifford Shopbell & Co., Evansville, Ind.; address proposals to E. R. Weathers, Sr. (See "Machinery Wanted.")

Ky., Lexington.—Christ Church Cathedral plans to erect \$30,000 edifice and parish-house. Address The Pastor, Christ Church Cathedral.

Ky., Winchester.—Central Baptist Church has plans by Edward Stamler, Lexington, Ky., for \$20,000 edifice. (Recently noted to erect church.)

La., Bunkie.—Presbyterian congregation will erect edifice; W. A. Ziegler, pastor.

La., Shreveport.—Noel Memorial Church, Rev. Francis A. Downs, pastor, will expend about \$40,000 to erect edifice.

Md., Annapolis Junction.—Junior Republic is having plans prepared by Bissell & Zinker, Philadelphia, Pa., for chapel; probably stone construction.

Md., Kensington.—Rev. Charles O. Rosensteel, pastor of St. John's Church, Forest Glen, Md., is interested in erection of proposed Catholic church; cost about \$4000.

Md., Cumberland.—Zion Reformed Church will erect edifice. Address The Pastor, Zion Reformed Church.

Md., Midland.—Presbyterian congregation plans to erect edifice; Rev. Stanley Jewell, pastor, Barton, Md.

N. C., Danbury.—Methodist Episcopal Church South will erect edifice; 24x36 feet; O. J. Cates, James Lasley, C. R. Hutcherson and others are interested.

N. C., High Point.—Washington Street Methodist Episcopal Church will erect edifice; J. W. Harris is on committee.

N. C., Tarboro.—St. James Methodist Episcopal Church, Rev. McWirtter, pastor, has plans by Wheeler & Stern, Charlotte, N. C., for edifice; 70x90 feet; ordinary construction; heating not decided; electric lighting; cost \$15,000. (See "Machinery Wanted.")

N. C., Winston-Salem.—West End Methodist Episcopal Church is having plans prepared by Wheeler & Stern, Charlotte, N. C., for proposed edifice; Gothic style; Oriental effect; brick; marble and terra-cotta trimmings; main auditorium to seat 500 and balcony to seat 200; cost about \$50,000. (Previously noted.)

Okla., Tulsa.—Rev. J. C. Magee, pastor of Methodist Church, is promoting erection of edifice.

S. C., Greenville.—First Lutheran Church plans to erect edifice; C. E. Lagerholm, W. A. Hantake and H. C. McKnight, trustees.

S. C., Rowesville.—C. D. Hydrick is interested in erection of Baptist church.

Tenn., Bristol.—First Methodist Episcopal Church, Rev. W. F. Pitts, pastor, has plans by Wheeler & Stern, Charlotte, N. C., for edifice recently noted; 75x76 feet; ordinary construction; heating not decided; electric lighting; cost \$15,000; date of opening bids not decided. (See "Machinery Wanted.")

Tenn., Bristol.—First Baptist congregation will erect \$50,000 edifice. Address The Pastor, First Baptist Church.

Tenn., Chattanooga.—Centenary Methodist Episcopal Church contemplates erection of edifice. Address The Pastor, Centenary Methodist Episcopal Church.

Tenn., Dickson.—Presbyterian Church will erect edifice. Address The Pastor, Presbyterian Church.

Tenn., Memphis.—St. Luke's Episcopal Church, Rev. H. W. Wells, Rector, has plans by John Gaisford, Memphis, for edifice; brick; white marble trimmings; cost \$23,000 to \$35,000.

Tenn., St. Elmo.—St. Elmo Methodist Episcopal Church South, Rev. W. L. Sarrell (not W. L. Correll, as recently noted), pastor, will expend \$25,000 to erect edifice; plans by R. H. Hunt, Chattanooga, Tenn.

Tex., Asherton.—Baptist congregation will erect edifice. Address The Pastor of Baptist Church.

Tex., Bonham.—First Christian Church, F. M. Thompson, chairman building committee, has plans by Sparger & Peters, Bonham, for edifice; 80x100 feet; reinforced concrete and brick; steam heat; electric lighting; cost \$20,000; date of opening bids not set. (Recently noted.)

Tex., Cuero.—Presbyterian congregation contemplates erection of \$20,000 edifice. Address The Pastor of Presbyterian Church. (See "Dwellings.")

Tex., Poth.—Catholic congregation will erect edifice. Address The Pastor, Catholic Church.

Tex., Hillsboro.—First Presbyterian Church is having plans prepared for \$15,000 edifice. Address The Pastor, First Presbyterian Church.

Va., Luray.—Mt. Carmel Baptist Church will erect edifice to replace present structure; 40x40 feet. Address The Pastor.

Va., Richmond.—St. James' Episcopal Church has plans by Noland & Baskerville, Richmond, for edifice; classic design; Doric pillars in front; cost about \$100,000.

Va., South Boston.—H. M. Miller, Roanoke,

Va., will have plans ready for bids in about three weeks to erect edifice for Baptist congregation; seating capacity of auditorium and Sunday-school room 1200; hot-air heat; electric lighting; R. S. Barbour, chairman building committee. (Recently noted.)

W. Va., Fayetteville.—Presbyterian congregation will erect edifice; brick or stone. Address The Pastor of Presbyterian Church.

CITY AND COUNTY

Ala., Decatur.—City Hall, etc.—Mayor and City Council will meet April 13 to select plans for city hall, fire station and city jail; 85x85 feet; cost \$20,000; will advertise for bids. (Bond issue for city hall recently noted.)

Ala., Huntsville.—City Hall and Public Offices.—City will erect city hall and public offices; 88x145 feet; fireproof construction; steam heat; electric lighting; electric sidewalk lights; water-power elevator; cost \$100,000; architect not selected. Address R. E. Smith. (Recently noted to vote \$100,000 bond issue.)

Fla., Bartow.—Library.—City proposes erection of \$8000 Carnegie Library; S. S. Greene, librarian.

Ga., Statesboro.—Fire Department.—City will soon award contract to erect fire-department building with stable in rear. Address The Mayor.

Ky., Bowling Green.—Armory.—Warren county contemplates erection of armory and annex to jail; drillroom 73x61 feet; cost about \$7000. Address County Commissioners.

Ky., Middlesboro.—City Hall, Carnegie Library, etc.—City will erect city hall, jail, fire department building, etc.; also erect library building; former two stories; 123x126 feet; pressed brick and stone; cost \$75,000; treasurer's office to have fireproof vault; jail building three stories; cells equipped with four-inch steel doors; fire department to accommodate three fire apparatuses, six stalls for horses, etc., on first floor; proposed library will cost about \$30,000. Address Mayor Helburn.

La., New Orleans.—Engine-house.—City opened bids to erect engine-house at North Carrollton Ave. and Moss St.; Petty & Irwin, New Orleans, are lowest bidders at \$11,730. (Previously noted.)

Md., Rockville.—Montgomery County Commissioners, Jos. T. White, president, Boyds, Md., are considering erection of jail.

Okla., Jay.—City Hall.—City will erect city hall. Address The Mayor.

Okla., Oklahoma City.—Hospital.—Bob Parman, City Clerk, will receive bids until 5 P. M. April 8 for completion of second and third floor of General Hospital and for hospital laundry and ambulance barn at Second and Stiles Ave.; certified check, payable to Mr. Parman, for 3 per cent. amount of bid; plans and specifications at office of Geo. F. Schreiber, architect, 308-10 Baum Bldg., Oklahoma City. (City recently noted to have voted \$25,000 bond issue for hospital.)

Tenn., Chattanooga.—Jail.—Hamilton county proposes issuing \$100,000 of bonds to erect jail. Address County Commissioners.

COURTHOUSES

Ga., Hinesville.—Liberty County Commissioners are having preliminary plans prepared by Chamberlain & Co., Birmingham, Ala., for courthouse to cost \$30,000; E. C. Miller, clerk. (Recently noted.)

Ky., Middlesboro.—Bell County Commissioners will erect courthouse.

Okla., Jay.—Delaware County Commissioners will erect courthouse. Address County Commissioners.

Okla., Nowata.—Nowata County Commissioners have plans by J. W. Roberts, Claremore, Okla., for courthouse; 88x112 feet; fireproof construction; cost \$70,000; will advertise for bids about April 20. (Recently noted.)

DWELLINGS

Ala., Alabama City.—R. B. Kyle, Gadsden, Ala., will erect eight-room residence; construction begun.

Ala., Birmingham.—Oscar R. Hundley will erect two-story frame dwelling; cost \$16,000.

Ala., Birmingham.—Dr. McLeister will erect residence; two stories; frame; cost \$5000.

Ala., Birmingham.—Sallie A. Haggard will erect two-story frame dwelling to cost \$3600, and one-story frame dwelling to cost \$1500.

Ala., Birmingham.—Sidney J. Bowie will erect two-story frame dwelling; cost \$15,000.

Ala., Birmingham.—V. E. Whitaker will erect two-story frame dwelling; cost \$3200.

Ala., Birmingham.—Pegram Meade will

erect two residences; one story; frame; cost \$4000.

Ala., Birmingham.—Mrs. M. E. Mollenhoff will erect residence; cost \$3000.

Ala., Birmingham.—W. G. Tyler will erect residence; two stories; frame; cost \$3000.

Ala., Birmingham.—O'Rear & Hall will erect two two-story frame dwellings; cost \$4850.

Ala., Birmingham.—Pegram & Meade will erect two one-story frame dwellings; cost \$4000.

Ala., Bonz.—Samuel Leath plans to erect residence.

Ala., Gadsden.—C. S. Ward will erect residence to replace burned structure.

Ala., Mobile.—F. O. Christianson, W. J. Mahbs and L. I. Burr, all of Chicago, Ill., purchased 375 acres of land and will erect number of dwellings.

D. C., Washington.—Dr. G. P. Parton, 4511 Wisconsin Ave. N. W., has plans by Cloughton West, 222 Oxford Bldg., Washington, for bungalow at Nebraska Ave. and 40th St. N. W.; two stories; 33x43 feet; cost \$6000.

D. C., Washington.—Edwin W. Dickle, 23 C St. N. E., has plans by Cloughton West, 222 Oxford Bldg., Washington, for two two-story colonial dwellings on C St. near 3d St. S. W.

D. C., Washington.—A. R. Taylor, 804 I St. N. E., has plans by Conrad Chaney, Washington, for residence at 1213 Morse St. N. E.; two stories; brick; cost \$2500; construction by owner.

D. C., Washington.—W. A. Craig & Co., Equitable Bldg., will erect 15 two-story six-room dwellings at Tennessee Ave. and C St. N. E.

D. C., Washington.—Kennedy Bros., 1336 H St. N. W., have plans by A. H. Sonnenman, Chevy Chase, Md., for four three-story brick and frame dwellings at 3200 to 3206 18th St. N. W.; cost \$45,000.

D. C., Washington.—H. R. Howenstein, 1314 F St. N. W., will erect two dwellings at 1330-34 Pennsylvania Ave. S. E.; two stories; brick; ordinary construction; furnace; plans by E. Hauser, 37 New York Ave. N. E., Washington; construction by owner.

D. C., Washington.—Milton Dana Morrill, Corcoran Bldg., is preparing plans for group of cottages; poured-cement construction.

Fla., Jacksonville.—Porcher L'Engle will erect seven two-story frame dwellings.

Fla., Jacksonville.—D. S. D. Belliny will erect two-story frame dwelling.

Fla., Jacksonville.—Pompy Small will erect two-story frame dwelling.

Fla., Redland.—J. L. Billingsley, Miami, Fla., will erect residence.

Ga., Atlanta.—Mrs. E. L. Bishop will not at present erect dwelling. (Recently noted.)

Ga., Atlanta.—C. W. Hummick will erect dwelling; cost \$3000.

Ga., Augusta.—Mrs. D. R. Grooves will erect residence.

Ga., Statesboro.—Math Akins will erect residence.

Ga., Statesboro.—Mayor McDougal will erect residence.

Ga., Statesboro.—Mrs. D. R. Groover will erect residence.

Fla., St. Augustine.—C. P. Townsend will probably erect residence.

Ga., Lagrange.—Dunson Mills will build 100 cottages for operatives. (See "Textile Mills.")

Ga., Savannah.—Mrs. Norah Foran will erect two-story dwelling.

Ga., Savannah.—H. O. Young will erect six two-story dwellings.

Ga., Savannah.—James W. Urquhart will erect residence.

Ga., Savannah.—Mrs. John G. Butler will erect residence.

La., New Orleans.—Jules Domecq will erect single frame cottage; cost \$4000.

La., New Orleans.—Mrs. Boissoneau will erect residence; one story; frame; cost \$4000.

La., New Orleans.—A. S. Lagman will erect double two-story residence; cost \$4200.

La., New Orleans.—Holy Trinity School will erect three double dwellings; cost \$7500.

La., New Orleans.—W. S. Dirker will erect two-story frame residence.

La., New Orleans.—J. D. Kavanaugh will erect double two-story residence; cost \$3000.

Md., Baltimore.—John J. Carlin, 215 St. Paul St., will expend \$12,000 to erect six dwellings; 14x50 feet; ordinary construction; steam heat; gas and electric lighting; cement sidewalks; plans by Stanislaus Rosell, Clifton Ave. and 7th St., Baltimore; construction by owner. (Previously noted.)

Md., Baltimore.—M. Filmore Carter will

expend \$2000 each to erect 15 dwellings; 14x58 feet; ordinary construction; steam heat; gas and electric lighting; plans by Stanislaus Russell, Clifton Ave. and 7th St., Baltimore; construction. (Previously noted.)

Md., Baltimore.—James W. Amos has plans by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for four cottages on Calverton Rd. near Frederick Ave.; two stories; iron spot brick; marble trimmings; cost \$1200 each.

Md., Baltimore.—Crescent Realty Co., 220 St. Paul St., will not erect dwellings at Forest Park. (Recent report an error.)

Md., Baltimore.—Arthur F. Nicholson will erect 30x50-foot dwelling; ordinary construction; hot-water heat; gas and electric lighting; cost \$5000; plans and construction by owner.

Md., Baltimore.—Harry C. Kalben, 215 Courtland St., has plans by Callis & Callis, 200 St. Paul St., Baltimore, for 20 dwellings on Robinson St. and Ellwood Ave.; two stories; brick; 13x45 feet; cost \$18,000.

Md., Baltimore.—P. L. Tunis will expend \$500 to erect dwelling at Windsor Hills; 30x50 feet; frame; steam heat; gas and electric lighting; plans by Henry J. Tinley, 214 N. Charles St., Baltimore; construction by owner. (Recently noted.)

Md., Catonsville.—Salem Lutheran Church, Rev. John C. Bowers, pastor, is having plans prepared by Walter M. Gieske, 66 Gunther Bldg., Baltimore, Md., for parsonage; 27x34 feet; frame and stucco; slate roof; granite foundation.

Md., Howard County.—S. L. Murray, Lawyers' Hill, Howard county, is having plans prepared by George Worthington, Law Bldg., Baltimore, for alterations and additions to residence.

Md., Mt. Washington.—Clarence G. Bouis, North Ave., Mt. Washington, has plans by Owens & Sisco, 1005 Continental Bldg., Baltimore, Md., for improvements to residence; two and a half stories; frame; cost about \$10,000; contractors estimating are Gladfelter & Chambers, 2072 Woodberry Ave.; Brown & Morgan, 15 E. Fayette St., both of Baltimore, Md.; Philip Watts, Pikesville, Md., and Israel Owens, Mt. Washington. (Recently erroneously reported to be erected by S. S. Bouis, 64 Knickerbocker Bldg., Baltimore, Md.)

Miss., Meridian.—J. D. McInnis has plans by Burt Stuart, Rosenbaum Bldg., Meridian, for residence; two stories; colonial style; frame; furnace; electric lighting; cost \$7000; will open bids soon.

Miss., Vicksburg.—Chester Yerger will erect bungalow.

Mo., Kansas City.—Charles E. Phillips will erect frame dwelling; cost \$3500.

Mo., Kansas City.—R. Y. Moore will erect two residences; frame; cost \$3500.

Mo., Kansas City.—Russell Investment Co. will erect five frame dwellings; cost \$10,000.

Mo., Kansas City.—W. B. Weaver will erect frame dwelling; cost \$3500.

Mo., Kansas City.—P. J. Neff will erect three frame dwellings; cost \$5500.

Mo., Kansas City.—J. D. Thomas will erect stone-veneer dwelling; cost \$3000.

Mo., Kansas City.—J. C. Simpson will erect three brick veneer dwellings; cost \$7800.

Mo., Kansas City.—P. S. Harris will erect stone dwelling; cost \$12,000.

Mo., Kansas City.—J. E. Biles will erect brick dwelling; cost \$3500.

Mo., Kansas City.—Kenneth Duncan will erect frame dwelling; cost \$5500.

Mo., Kansas City.—Robert T. Herrick will erect stone dwelling; cost \$5000.

Mo., Kansas City.—W. O. Pennell will erect stone-veneer dwelling; cost \$5000.

Mo., Kansas City.—T. J. Dansoth will erect brick-veneer dwelling; cost \$3000.

Mo., Kansas City.—J. W. Strain will erect frame residence; cost \$5300.

Mo., St. Louis.—Ro Ches Realty Investment & Building Co. will erect nine 1½-story dwellings; cost \$18,000.

N. C., Charlotte.—J. E. Curlee has plans by F. L. Bonfoey, Charlotte, for dwelling; two stories; 38x56 feet; frame; hot-air heat; electric lighting; cost \$4500. (See "Machinery Wanted.")

N. C., Charlotte.—S. B. McLaughlin has plans by F. L. Bonfoey, Charlotte, for dwelling; 30x45 feet; two stories; frame; craftsman style architecture; stained-shingle roof; hot-air heat; electric lighting; cost \$4000; day labor.

N. C., Charlotte.—George P. Wadsworth will open bids in about two weeks for erection of dwelling; 36x45 feet; two stories and basement; frame; 10 rooms and sleeping porch; three bathrooms; slate roof; Honeywell hot-water system of heating; electric

lighting; cost \$6500; plans by Louis H. Asbury, Charlotte. Address architect.

N. C., Greensboro.—John T. Hunt will erect residence; cost \$8000; size 42x70 feet; steam heat; electric conduit system of lighting; tile roof; plans by F. A. Weston, Greensboro; construction by owner. (See "Machinery Wanted.")

N. C., Charlotte.—Walter W. Watt, Jr., has plans by Louis H. Asbury, Charlotte, for residence; two stories and basement; eight rooms and two baths; 43x62 feet; frame; slate roof; hot-water heat; electric lighting; cost \$4500.

N. C., Charlotte.—S. F. Conrad will open bids in about two weeks for erection of dwelling; two stories and basement; 50x71 feet; two baths; hot-air heat; electric lighting; cost \$4000; plans by Louis H. Asbury, Charlotte. (See "Machinery Wanted.")

N. C., Charlotte.—F. C. Abbott has plans by Hook & Rogers, Charlotte, for residence; 10 rooms; stone and shingle.

N. C., Hickory.—W. B. Council will erect number of cottages.

N. C., Hickory.—J. A. Lentz will erect two-story dwelling.

N. C., Hertford.—W. R. White will erect residence.

N. C., Monroe.—R. F. Beasley, editor Monroe Journal, has plans by Wheeler & Stern, Charlotte, N. C., for frame dwelling; 30x70 feet; two stories; heating not decided; electric lighting; cost \$4000; date of opening bids not decided. (See "Machinery Wanted.")

N. C., Wadesboro.—R. T. Bennett will rebuild residence recently reported burned; 40 feet long; one story; mill construction. (See "Machinery Wanted.")

Okla., Oklahoma City.—H. W. Clegorn will erect two dwellings.

Okla., Muskogee.—Gordon Murray will erect residence.

Okla., Muskogee.—N. B. Maxey will erect residence.

Okla., Oklahoma City.—Harvey Garrison will erect residence; two stories; frame and brick; cost \$10,000.

Okla., Oklahoma City.—J. J. Culbertson will erect residence; two stories; brick; tile roof; cost \$12,000.

Okla., Oklahoma City.—J. W. Mann will erect one-story six-room residence and two-story eight-room residence; cost \$2500 to \$5000; plans and construction by owner.

S. C., Camden.—W. J. Dawes, manager of Camden Brick Co., will erect brick residence.

S. C., Camden.—Henry G. Savage will make improvements to residence, including erection of fourth story and porches.

Tenn., Chattanooga.—T. C. Thompson has plans by C. E. Bearden, Chattanooga, to remodel residence; cost \$4000.

Tex., Dallas.—C. O. Moser will erect residence; two stories; frame; cost \$3500.

Tex., Houston.—H. Yetter will erect five-room residence.

Tex., Orange.—Home Mission Society of the Methodist Church plans to erect parsonage; cost \$3000.

Tex., Southland (not a postoffice).—A. B. Robertson has plans by Waller & Field, Fort Worth, Tex., for brick residence.

Tex., Victoria.—Robert L. Ferris has plans by Hull & Praeger, Victoria, for \$4000 residence.

Tex., Cuero.—Presbyterian congregation will erect \$2500 manse and contemplates, it is reported, erection of \$20,000 edifice. Address The Pastor of Presbyterian Church.

Va., Lynchburg.—Mrs. Janet W. Scruggs will erect frame dwelling; shingle roof; cost \$2000.

Va., Lynchburg.—J. Bryan Heard will erect frame dwelling; shingle roof; cost \$2000.

Va., Luray.—Clifford G. Bailey will erect residence.

Va., Pulaski.—W. J. Harman is having plans prepared by Huggins & Bates, Roanoke, for \$3000 residence.

Va., Richmond.—M. E. Johns will erect two-story brick dwelling; cost \$5000.

Va., Richmond.—Luther Wright will erect three two-story brick dwellings.

Va., Richmond.—Delaney & Gann will erect two detached brick dwellings; cost \$10,000.

Va., Richmond.—Geo. Cole Scott will receive bids until April 10 to erect residence; French style; brick and stone; cost \$65,000; plans by Noland & Baskerville.

Va., Roanoke.—W. T. Manning will erect two-story brick-cased dwelling; cost \$5000.

Va., Roanoke.—R. J. Wright will erect eight residences; nine rooms; cost \$3000 each; construction begun.

Va., Roanoke.—A. C. Needles has plans by

Frye & Chesterman, Lynchburg, Va., for residence.

Va., Woodstock.—J. D. Crabill will erect residence.

W. Va., Clarksburg.—Dr. John Gardner, Hyattstown, Md., has plans by B. Edward Kepner, Frederick, Md., for two-story frame dwelling; construction begun.

W. Va., Williamson.—R. N. Taylor will erect brick residence.

GOVERNMENT AND STATE

Ala., Ensley.—Treasury Department, James Knox Taylor, supervising architect, will erect postoffice building; cost about \$80,000.

Ark., Hope.—Postoffice.—Treasury Department, Office of Supervising Architect, James Knox Taylor. Sealed proposals will be received until 3 P. M. May 11, and then opened, for construction complete (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States post office at Hope, Ark., in accordance with drawings and specifications, copies of which may be obtained from custodian of site at Hope or at this office at discretion of supervising architect.

Mo., Rolla.—Federal Buildings.—Treasury Department, James Knox Taylor, supervising architect, Washington, D. C., invited 67 architects to submit competitive plans for Federal buildings at Rolla, Mo.; Orange, N. J., and Waukegan, Ill.

Tex., Galveston.—Quarantine Station.—Treasury Department, James Knox Taylor, supervising architect, Washington, D. C., will erect quarantine station, consisting of executive building, one story, surrounded by six-foot gallery; 10 rooms, etc., ornamental trimmings; tower rising nine feet above roof; assistant's quarters one story, 54x38 feet, six-foot gallery, eight rooms; medical officers' quarters one story, "L" shape, 52x60 feet, seven rooms, surrounded by gallery; attendants' quarters one story, 86x20 feet, seven-foot balcony on three sides, six rooms; bar racks 100x36 feet, surrounded by seven-foot balcony and to contain dormitory 36x42 feet, six rooms, and hall 7.6 feet; hospital building 54x38 feet, six-foot gallery, six rooms and two halls; disinfectant house 26x30 feet, connected with wharf by bridge; oilhouse; storm refuge house on heavy piling with base 28 feet square, rising 17.6 feet above reservation level; sheltered floor space 9x9 feet reached by iron ladders; executive building to be connected by bridge to wharf 300 feet long; wharf to have 175 piling from 40 to 52 feet long, bulkhead 488 piling 14 to 28 feet long; buildings 321 piling 13 to 16 feet long; all piling crescented, 14 and 21 pounds; building to be screened, equipped with electric lights, plumbing, water fixtures, etc., and cost from \$100,000 to \$125,000. (Recently noted to receive bids until May 6 for this station.)

W. Va., Salem.—Girls' Home.—Girls' Industrial Home will erect additional building; has \$20,000 appropriation; Wm. E. Glasscock, Governor, Charleston, W. Va.

HOTELS

Ala., Fayette.—Mrs. Kate Garner will erect brick hotel to replace structure recently burned.

Ga., Augusta.—Chamber of Commerce is promoting erection of hotel to cost about \$450,000; T. S. Raworth, chairman of committee.

Ga., Normentown.—C. S. Meadows is interested in erection of hotel.

Ky., Louisville.—Neighborhood House, 428 1st St., will remodel structure and erect addition 45x69 feet; will remove number of walls in present building and extend "L" forward to front; cost of improvements, \$16,000.

La., Donaldsonville.—J. E. Blum is promoting erection of proposed \$55,000 hotel; four stories; brick; elevators.

Miss., Vicksburg.—Park Hotel Co. incorporated with \$25,000 capital stock by Vincent Lavechia, H. E. Rice, both of Vicksburg; Gaston Saux of Grunewald Hotel, New Orleans, La., and others.

N. C., Asheville.—Gay Greene and John Lange have plans by Smith & Carrier, Asheville, for hotel at N. Main and E. College Sts.; seven stories; seven stories on first floor; main entrance will open into lobby 50x70 feet; reception-room 27x35 feet; dining-room 50x80 feet; kitchen will be supplied with fresh air through ducts and extracted by suction arrangements which carry to flues connecting with main stack; first floor, except kitchen, will be of Numidian marble; electric lighting, heating and refrigerating plants in basement; two passenger and one freight elevator; 80 of 105 rooms equipped with private baths; roof garden surrounded by columns supporting slate roof; ballroom

over south wing 44x84 feet; maple floor; cost, including furnishings, about \$225,000. (Previously noted.)

N. C., Fayetteville.—Stonehaven Hotel Co. incorporated with \$100,000 capital stock by J. P. Sanders, J. H. McAden and E. R. Irwin.

N. C., Hertford.—C. W. Williford, Church and Washington Sts., will erect hotel; frame construction.

Okla., Oklahoma City.—W. H. Shellenbarger will erect two-story brick store and hotel building; cost \$10,000.

Tex., El Campo.—Holland, Buhler & Welder, Victoria, Tex., will expend \$13,000 to erect annex to hotel; 91x50 feet; two stories; ordinary construction; soundproof flooring; Careys roofing, tar and gravel roofs; wire and prism glass; install 4x6-foot freight elevator, 2000 pounds capacity; plans by Hull & Praeger, Victoria, Tex.; bids opened March 31. (Recently noted.)

Tex., Houston.—Almon Cotton will erect 50x100-foot hotel; 10 stories; fireproof construction; plans not determined. (Recently noted under "Apartments.")

Tex., New Braunfels.—P. G. Henne and P. F. Sussdorf are interested in erection of proposed hotel; cost \$125,000 to \$150,000.

Va., Chester.—A. Lee Thaw, Richmond, Va., purchased Chester Hotel and is reported to remodel same.

W. Va., Huntington.—Taylor & Robinson, Huntington, are among contractors estimating on erection of proposed hotel at Sixth Ave. and 9th St.; six stories; reinforced concrete; fireproof; cost \$200,000.

MISCELLANEOUS

Ala., Mobile.—Auditorium.—Mobile Commercial Club, Jacob D. Bloch, president, is promoting erection of auditorium; L. C. Irvine, chairman of committee.

D. C., Washington.—Grandstand, etc.—National Capital Horse Show, Henry T. Allen, president, organized; has plans by Melvin C. Hazen, 213 11th St. S. W., for grandstand, paddock, ring, stables, etc.; Wm. P. Eno, 1256 22d St. N. W., chairman of executive committee.

Fla., Pensacola.—Clubhouse.—De Silva Ferriss Company will erect clubhouse with frontage of 40 feet, to be occupied by Pensacola Yacht & Motor Boat Club.

Fla., Tampa.—Clubhouse.—Centro Espanol Society has plans by Fred James, Tampa, for clubhouse in West Tampa; three stories; brick and stone; cost \$65,000.

Fla., Ybor City, Ind. Sta., Tampa.—Clubhouse.—Centro Espanol Society is having plans prepared by F. J. Kennard, Tampa, for clubhouse; three stories; brick and stone; cost \$65,000.

Ky., Lexington.—Parish-house.—Christ Church Cathedral plans to erect parish-house. Address The Pastor, Christ Church Cathedral. (See "Churches.")

Md., Elkton.—Hospital.—Dr. Howard Bratton plans to erect annex to hospital.

Md., Hagerstown.—Clubhouse.—Hagerstown Country Club will open bids April 15 to erect clubhouse; 140x40 feet; stone; hot-water or steam heat; gas and electric lighting; cost \$25,000; plans by Mack & Koontz; George B. McWolf, probable contractor. Address proposals to C. C. Easton. (Recently noted.)

Mo., Kansas City.—Hospital.—Christian Church Hospital Association, J. W. Ferry, president, will erect \$200,000 building.

N. C., Hickory.—Hospital.—Dr. J. H. Shuford will erect two-story hospital building; brick construction.

S. C., Clinton.—Orphanage.—Thornwell Orphanage, Rev. J. B. Branch, superintendent, will make improvements to orphanage, including erection of additional building, to cost about \$5000, installation of sewerage system and erection of superintendent's cottage to cost about \$2000, on which construction has begun.

S. C., Greenwood.—Hospital.—Hospital Association, Dr. R. B. Epling, chairman and advisory board, is having plans prepared by Sayre & Baldwin, Anderson, S. C., for hospital; cost \$6500.

S. C., Hartsville.—Armory.—E. E. Carnes will erect two-story store and armory building.

Tenn., Knoxville.—Home.—East Tennessee Nurses' Association will probably erect nurses' home.

Tenn., Memphis.—Orphanage.—St. Peter's Orphanage will erect \$20,000 industrial building and infants' home.

Tex., Fort Worth.—Clubhouse.—River Crest Country Club, Morris Berney, president, will expend \$20,000 to \$40,000 to erect clubhouse; plans not determined; architect not employed. (Recently noted.)

Tex., Houston.—Society Building.—Jewish Literary Society contemplates erection of building.

Tex., Wharton.—Sanitarium.—Dr. G. L. Davidson is promoting erection of proposed \$16,000 sanitarium.

Va., Petersburg.—Fair Buildings.—South Side Agricultural and Industrial Exhibit Association, 11 Law Bldg., will open bids April 10 to erect fair buildings; one 12x24 feet, 32x100 feet, 48x150 feet, 100x150 feet, 48x250 feet, and two 24x100 feet; ordinary construction; electric lighting; cost \$20,000 to \$25,000; plans by M. P. Andrews & Co., Petersburg, at office of company as above. (Recently noted.)

Va., Petersburg.—Fair Buildings.—South Side Virginia Fair, J. H. Patterson, secretary, 11 Law Bldg., will receive bids until 12 o'clock noon April 10 for erection of auditorium, grandstand, agricultural hall, poultry-house, cattle, sheep and swine pens, horse barns, fencing, etc., at West End Park; plans and specifications at company's office as above.

Va., Richmond.—Home.—Baptist Home for Aged Women is planning to erect home to replace present structure.

Va., Richmond.—Home.—Baptist Home for Aged Women, Harvie St. and Grove Ave., plans to erect home to replace present structure; Mrs. W. A. Harris, president board of managers.

Va., Richmond.—Postoffice, Building.—C. Ridgway Moore will erect building, two floors of which will be leased by Government for Postal Substation A; brick construction; 40x80 feet; boiler-room, heating plant, etc., in basement; \$15,000.

Va., Virginia Beach.—Casino.—Norfolk Southern Railroad, F. L. Nicholson, chief engineer, Norfolk, Va., opened bids to erect casino, to contain hotel, dance hall, etc.; two stories; cost about \$30,000; Walker Construction Co., Norfolk, Va., is lowest bidder. (Recently noted.)

W. Va., Huntington.—Armory.—Biggs-Wilson Company will erect building and lease to State for armory; 80x150 feet; two stories and basement; drillroom, 12,000 square feet floor space.

W. Va., Morgantown.—Fair Buildings.—S. S. Dusenbury purchased control of fair grounds, will organize company and erect additional buildings, reconstruction grandstand, etc.

RAILWAY STATIONS

Fla., Pensacola.—Louisville & Nashville Railway, W. H. Courtenay, chief engineer, Louisville, Ky., will expend \$250,000 to erect proposed depot.

Ga., Dalton.—Southern Railway Co., 613 Equitable Bldg., Atlanta, Ga., advises Manufacturers Record that company has no plans for freight depot. (Recent report incorrect.)

Ga., Willacoochee.—Georgia Southern & Florida Railway, W. C. Shaw, chief engineer, Macon, Ga., will rebuild station reported burned.

Md., Cumberland.—Western Maryland Railroad, H. R. Pratt, chief engineer, Baltimore, Md., will erect depot.

Miss., Jackson.—Yazoo & Mississippi Valley Railroad, S. S. Morris, general superintendent, Memphis, Tenn., will either erect new freight and passenger station or enlarge and improve present structures.

N. C., Gastonia.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., will erect passenger station; white pressed brick; steam heat; cost about \$25,000.

S. C., Barnwell.—Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wilmington, N. C., will remodel and enlarge depot.

S. C., Barnwell.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., will erect passenger station.

Tex., Baird.—Texas & Pacific Railway Co., R. S. Wathen, chief engineer, Dallas, Tex., awarded contract to R. H. Parker for erection of passenger station; double story with office on second floor; 60x35 feet; freight-house attached, 70x30 feet.

Tex., Pecos.—Texas & Pacific Railway Co., R. S. Wathen, chief engineer, Dallas, Tex., will erect combined freight and passenger station; 36x208 feet; brick and concrete. (Previously noted.)

Tex., Terrell.—Texas & Pacific Railway Co., R. S. Wathen, chief engineer, Dallas, Tex., awarded contract to T. H. Vaughn for erection of freight depot; 140x30 feet; brick. (Previously noted.)

Va., Martinsville.—Danville & Western Railroad Co., Theodore Parker, general superintendent, Danville, Va., is having plans prepared by Pettit & Cave, Herman Bldg., Dan-

ville, Va., for passenger station and umbrella sheds; Spanish style architecture; brick; tapestry brick for outside walls; red or green tile roofs.

SCHOOLS

Ala., Guntersville.—City will expend \$20,000 to erect school. Address The Mayor.

Ark., Little Rock.—School Board will open bids April 14 to erect addition to and remodel High School building; seven-room addition; will convert present auditorium into classrooms, first floor into study hall; floor divided into classrooms will replace second-floor gallery; fireproof construction; certified check for \$1000; plans and specifications at office of Frank W. Gibb & Co., architects, Gazette Bldg., Little Rock, or of Little Rock High School Board.

Ark., Rogers.—School Board purchased site and will erect school; brick and stone; cost about \$35,000.

Ark., Stuttgart.—City will have plans prepared by Mitchell Seligman, Stuttgart, for school; cost \$50,000. Address The Mayor.

Ark.-Tex., Texarkana.—School Board has plans by Witt & Siebert, Texarkana, for proposed \$100,000 high-school building.

Ga., Athens.—Board of Education recommends issuance of \$125,000 worth of bonds to erect additional schools.

Ga., Augusta.—Tabernacle Baptist Church, Rev. T. C. Walker, pastor, plans to erect industrial school.

Ga., White Plains.—City defeated \$7000 bond issue to erect school; T. C. Holden, Mayor. (Recently noted to vote on this issue.)

Ky., Elizabethtown.—City and county plan to erect high-school building to cost \$40,000; address J. L. Plinkner, superintendent of schools. (Recently noted to vote on bond issue for this improvement.)

La., Coushatta.—City voted tax to erect \$25,000 school. Address The Mayor.

La., Forest Hill.—School Board, E. E. Galligan, secretary building committee, will open bids April 17 to erect high-school building; two stories; 120x100 feet; 40 recitation and 8 class rooms, principal's office, laboratory and auditorium; brick; semi-fireproof construction; heating and lighting not decided; cost \$20,000; plans by Stevens & Nelson, 1109 Hennen Bldg., New Orleans, La.

La., Lake Charles.—Sisters of the Holy Cross purchased site and will erect convent and school to replace burned structures.

La., New Orleans.—City rejected all bids for erection of Fourteenth ward school and will call for new bids; W. J. Hardee, City Engineer. (John Minot, New Orleans, recently reported as lowest bidder at \$49,560.)

La., Rayne.—City will erect high-school building; ordinary construction; cost \$20,000; address proposals to Dr. J. D. Hunter. (Recently noted.)

La., Sulphur.—Board of School Directors of Calcasieu parish will open bids April 18 to erect high-school building; pressed brick; hot-air heat; cost \$20,000; plans by I. C. Carter, Lake Charles, La.; address architect. (Recently noted.)

Miss., Benton.—Yazoo County School Board, Yazoo City, Miss., will erect proposed agricultural high school.

Miss., Newton.—City will vote April 26 on \$25,000 bond issue to erect school. Address The Mayor.

Miss., Seminary.—City voted proposed \$10,000 bond issue to erect school and construct water-works system. Address The Mayor.

Mo., Springfield.—State Normal School Trustees plan to erect \$65,000 annex to main building for assembly hall and gymnasium.

N. C., Raleigh.—Agricultural and Mechanical College plans to erect Young Men's Christian Association building.

N. C., Scotland Neck.—City plans to erect school building to replace burned structure; cost about \$20,000. Address The Mayor.

Okla., Beggs.—School District No. 4, Okmulgee county, will open bids about May 1 to erect 40x100-foot addition to school building; ordinary construction; gas lighting; cost \$5000. Address District School Commissioners. (Bond issue recently noted.)

Okla., Earlsboro.—City voted \$10,000 bond issue to erect brick school. Address The Mayor.

Okla., Oklahoma City.—Oklahoma City College for Young Ladies, N. L. Linebaugh, president, plans present expenditure of \$100,000 for reinforced concrete brick administration building and \$85,000 each for two or three brick semi-fireproof dormitories; Greek cross shape; three stories; 186x186x86 feet; dormitories two stories; steam heat from central heating plant; T. J. Hodnett, engi-

neer in charge; will award subcontracts; plans include total expenditure of \$1,000,000 for buildings, etc. (Recently noted.)

Okla., Perry.—Board of Education will receive bids until 7 P. M. April 10 to erect high-school building; certified check for 5 per cent. amount of bid; plans and specifications at office of Van Meter & Schmitt, architects, 823 Insurance Bldg., Oklahoma City, Okla.; First National Bank, Perry, or may be had on deposit of \$25.

S. C., Rock Hill.—Winthrop College is having plans prepared by Hook & Rogers, Charlotte, N. C., for industrial arts and science building; has \$60,000 appropriation.

Tenn., Harrogate.—Lincoln Memorial Institute, Dr. Hubbell, president, will erect building.

Tenn., Knoxville.—Knox county will issue \$50,000 of bonds for schools; \$25,000 for paying indebtedness and \$10,000 for establishment of high schools at junction of the rivers and one at South Knoxville; M. W. Wilson, superintendent of schools.

Tenn., Nashville.—American Interchurch College for Religious and Social Workers has incorporated; president, James D. Blanton, president of Ward Seminary; vice-president, C. Savage, president of Christian Union of Nashville; recording secretary, John H. De Witt; general secretary, J. E. McCulloch, president of Methodist Training School; plans to purchase site and erect buildings for college at cost of \$50,000; further details not available at present.

Tenn., Springfield.—City voted \$15,000 bond issue to erect addition to school. Address The Mayor.

Tex., Bridgeport.—City voted \$20,000 bond issue to erect school. Address School Board. (Recently noted to vote on this issue.)

Tex., Farmersville.—City will erect three-story school building; 12 or 15 rooms; ordinary construction; cost \$20,000; architect not employed. Address R. S. Pike. (Recently noted to have voted \$20,000 bond issue.)

Tex., Harlingen.—School Board will receive bids until April 15 to erect high-school building; two stories; brick; also two-story four-room brick school; certified check for \$200, payable to John E. Snavey, president of School Board; plans and specifications at office of Green & Briscoe, architects, 525-529 Commercial Bank Bldg., Houston, Tex., or of president of School Board.

Tex., McGregor.—City voted \$15,000 bond issue to erect proposed high-school building. Address The Mayor.

Tex., Petty.—Independent School District will vote April 23 on \$12,000 bond issue to erect brick school building; A. Collier, president board of trustees. (Previously reported.)

Va., Danville.—School Board, J. W. Carter, chairman, will receive sealed proposals until 2.30 P. M. April 21 for erection of school building; 14 rooms and auditorium; plans and specifications can be obtained from Pettit & Cave, architects, Herman Bldg., Danville; usual rights reserved. Recently noted.)

Va., Denbeigh.—Denbeigh School District of Warwick county will vote April 19 on \$5000 bond issue to erect school. Address District School Trustees.

Va., Portsmouth.—School Board has plans by Charles M. Robinson, 1024 Mutual Bldg., Richmond, Va., for two school buildings; hot-air heat; electric lighting; cost \$20,000 each; date of opening bids not set. Address architect.

Va., Portsmouth.—School Board plans to erect annex to Cook-street school.

Va., Suffolk.—School Board will expend \$35,000 to erect school building; hot-air heat; electric lighting; plans by Charles M. Robinson, 1024 Mutual Bldg., Richmond, Va.; will open bids April 25; address architect. (Recently noted.)

W. Va., Alderson.—Alderson Baptist Academy will have plans May 1 for \$40,000 academic building recently noted; 40 feet by 225 feet 6 inches; ordinary construction; steam heat; James L. Montgomery, Charleston, W. Va., architect; address architect. (See 'Machinery Wanted'.)

W. Va., Eckman.—Browns Creek District Board of Education, F. C. Cook, secretary, Welch, W. Va., will erect eight-room school building; brick and stone; heating and lighting not decided; architect not employed.

W. Va., Kimball.—Browns Creek District Board of Education, F. C. Cook, secretary, Welch, W. Va., will erect four-room school building; heating and lighting not decided; architect not employed.

W. Va., Keystone.—Browns Creek District Board of Education, F. C. Cook, secretary, Welch, W. Va., will erect eight-room school building; brick and stone; heating and light-

ing not decided; cost \$30,000; architect not employed.

W. Va., Wellsburg.—Board of Education proposes issuance of \$85,000 of bonds to erect proposed school.

STORES

Ala., Boaz.—Samuel Leath will erect store building.

Ala., Boaz.—Williams & Bro. will erect brick business building; site 100x53 feet.

Ark., Little Rock.—J. E. Skillern will erect business building.

Fla., Plant City.—S. E. Mays will erect brick business building.

Fla., Plant City.—Strickland Bros. will erect brick business building.

Fla., Tampa.—A. J. Knight will erect two store and apartment buildings; frontages 210 and 315 feet; two stories; stores on lower floors; apartments above; cost \$125,000; plans by A. L. Shaw, Tampa.

Ga., Atlanta.—J. L. Bowles will erect \$3700 building.

Ga., Atlanta.—Pittman Construction Co. will erect \$3000 building.

La., Bunkie.—J. P. Briden will erect two-story brick business building.

Ga., Columbus.—James Kuttrell will erect business building; three stories; brick; 40x69 feet.

La., Houma.—Alfred Lewald will erect business building; brick; fireproof.

Mo., Kansas City.—H. G. Kallil will erect brick store building; cost \$6500.

N. C., Wadesboro.—J. E. Mercer will probably erect brick store.

Okla., Claremore.—E. Mouson will erect two-story building.

Okla., Hobart.—Starns Bros. are having plans prepared by William McCause, Hippen Bldg., Hobart, for store building; three stories and basement; 50x100 feet; cost \$25,000.

Okla., Oklahoma City.—E. M. Jones will erect building to replace burned structure; two or three stories; cost \$25,000 to \$40,000.

Okla., Oklahoma City.—Bass Furniture Co., 13-23 E. Main St., will erect additional store to building; cost \$6000.

Okla., Oklahoma City.—W. H. Shallenbarger will erect store and hotel building; two stories; brick; cost \$10,000.

Okla., Okemah.—W. H. Dill will erect business building; stone; pressed-brick front.

S. C., Ridgeway.—I. C. Thomas has plans by James B. Urquhart, 903 Loan and Exchange Bank Bldg., Columbia, S. C., for store building; two stories; pressed brick; plate-glass front; tile vestibule and roof; steam heat; gas lighting.

S. C., Hartsville.—Powe & Boyd will erect \$2000 drug store.

S. C., Hartsville.—E. E. Carnes will erect two-story store and armory building.

Tenn., Clarksville.—Drane, Manning & Glenn will erect business building; 70 feet 10 inches by 109 feet 4 inches; fireproof construction; plans not made.

Tenn., Dickson.—Y. W. Dodson and J. C. Foster will erect business building.

Tenn., Dickson.—M. M. Taylor will erect concrete-block business building.

Tenn., Memphis.—Hulings Realty Co. has plans by Jones & Furlinger, Memphis, for six store buildings at Huling Ave. and Main St.; three stories and basement; sprinkler system; heavy-duty elevators; cost \$150,000; corner store to be occupied by White-Wilson-Drew Company, and will be equipped with electric-motor conveyors, merchandise chutes, etc.; awarded contract at \$60,000 to C. D. Parker, Memphis, for erection of two of these structures. (Huling Realty Co. recently noted to erect this structure.)

Tenn., Memphis.—D. A. Fisher and F. N. Fisher will erect six-story business building.

Tex., Dallas.—M. Griffin O'Neil will erect business building; two stories; fireproof; cost \$15,000.

Tex., Fort Worth.—Montgomery, Ward & Co., Chicago, Ill., will erect five-story building and conduct mail-order house.

Tex., Haskell.—Lee Pierson will erect business building; two stories; brick; 45x100 feet.

Tex., Waco.—Waco Drug Co. will receive bids until 4 P. M. April 10 to erect four-story and basement brick building; plans, specifications, etc., at office of Scott & Pearson, architects, Waco.

Va., Lynchburg.—Miss Iora Ford will erect brick store; slag roof; cost \$10,000.

Va., Norfolk.—Talbot estate will erect store and office building.

Va., Richmond.—C. T. Friend will erect three-story brick store; cost \$8000.

Va., Richmond.—Raffael Francione will erect two-front three-story brick store building; combined frontage, 47 feet; depth, 126 feet; cost about \$20,000.

Va., Portsmouth.—Henry Kirn has plans by B. F. Mitchell, Norfolk, Va., for business building; four stories; 210x70 feet; dark red brick with buff terra-cotta trimmings; six stores on lower floor from 15 to 24 feet wide; 48 offices above; two electric elevators; two fire escapes; steam heat; bids received until April 4. Contractors estimating are Jesse Johnson, C. H. Schub, Baker & Brinkley, Dear & Totty, Myers-Turpin Construction Co., Harvey Abrames, John Monk, West-Richardson Company, Gregory & Williamson, Moore Construction Co., J. D. Anders, all of Norfolk, Va.; C. N. Moody, E. B. Wilkins, both of Portsmouth; J. W. Davis, Newport News, Va. (Previously noted to erect this building.)

Tenn., Waverly.—Slayden & McNabb will erect \$10,000 three-story concrete business building to be occupied by Hooper & Porch. (See "Warehouses.")

Tex., Port Arthur.—Peter Stock will erect business building; two stories; brick; 25x145 feet; cost \$10,000.

Va., Manassas.—W. N. Lipscomb will rebuild mercantile and office building; 30x80 feet; brick; cost \$30,000. (Recently reported burned.)

Va., Richmond.—Watkins-Cottrell Company is not ready to announce plans for improvements to business building recently purchased; will not get possession of property until January, 1912; details not determined. (Lately noted.)

W. Va., Bluefield.—H. Hyman of Keystone, W. Va., will remodel building occupied by Randolph & Mittendorf.

W. Va., Charleston.—Claude Guthrie will erect business building; two stories.

W. Va., Charles Town.—D. J. Heidwahl will erect business building to replace present structure.

W. Va., Martinsburg.—E. F. Millard will remodel building for stores and apartments; cost \$5,000.

W. Va., New Martinsville.—W. E. Wharton has purchased business building; will remodel and erect 40-foot warehouse; ordinary construction; plans not determined.

W. Va., Williamson.—Dr. H. C. Goings is reported to erect business building.

THEATERS

La., Covington.—L. P. Delcroix and V. H. Frederick will erect electric theater.

Miss., Vicksburg.—Herman Fichtenberg is having plans prepared by William A. Stanton, Vicksburg, Miss., for 30x142½-foot theater; fireproof construction; electric lighting; tile sidewalks. (Recently noted.)

Miss., Vicksburg.—Wm. A. Stanto prepared plans for proposed moving-picture theater.

Tex., Fort Worth.—W. H. Ward and associates will erect vaudeville theater; cost about \$30,000.

Tex., Houston.—George M. Jenks and Clark Cox will expend \$30,000 to erect theater, etc., recently noted. (See "Miscellaneous Enterprises.")

W. Va., Bluefield.—H. Hyman of Keystone, W. Va., will erect three-story building; lower floor for theater.

WAREHOUSES

Ala., Mobile.—City has not decided upon type of construction (whether concrete or steel) for warehouses along city's wharves; 150 feet; amount available \$50,000; P. L. Lyons, Mayor. (Recently noted.)

Ala., Anniston.—Farmers' Union Warehouse Co. will erect addition to warehouse; 100x300 feet.

Fla., Live Oak.—Middle Florida Wholesale Grocery Co. will enlarge warehouse.

Fla., Tampa.—Mallory-Clyde Steamship Co. will erect warehouse and platform; cost \$15,000 to \$20,000; other improvements contemplated.

Fla., Tampa.—Thomas Land Co., P. O. Knight, president; W. E. Thomas, secretary-treasurer, will erect warehouse for use of Tampa Hardware Co.; four or five stories; 105x105 feet; brick.

Ky., Louisville.—George L. Martin will erect warehouse for J. I. Case Machine Co.; two stories; brick; cost \$16,000.

Md., Baltimore.—Bridell Transfer Co., 34 S. Calvert St., is having plans prepared by Henry J. Tinley, 314 N. Charles St., Baltimore, for warehouse and stable at McMeacon and Rutter Sts.; brick and stone; slag roof; concrete base and foundation; cement and sheet-asphalt flooring.

N. C., Raleigh.—Job P. Wyatt & Son will erect warehouses; brick and steel; four stories; 64x140 feet; fireproof; electric elevators.

N. C., Salisbury.—Rowan Farmers' Co-operative Educational Union is promoting erection of cotton warehouse.

S. C., Hartsville.—J. L. Coker & Co. will erect brick warehouse.

S. C., Olanita.—J. C. Tryluck, D. E. Frank and A. J. Tomlinson Incorporated Olanita Warehouse Co.; will erect tobacco warehouse.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Md., Baltimore.—Alexander Yearley & Sons awarded contract to A. K. Boteler, 1323 Myrtle Ave., Baltimore, to erect proposed apartment-house; 17x45 feet; ordinary construction; steam heat; cost \$4,000; plans by Mottu & White, 322 N. Charles St., Baltimore.

ASSOCIATION AND FRATERNAL

La., Alexandria.—Benevolent and Protective Order of Elks awarded contract to E. T. Lam, Pineville, La., to erect lodge building; steam heat; electric lighting; plans by Stevens & Nelson, 1109 Hennen Bldg., New Orleans, La. (Previously noted.)

N. C., Chapel Hill.—Wilkerson-Moffitt Company, Durham, N. C., has contract to erect proposed fraternity hall; cost \$5,000.

S. C., Columbia.—J. D. Wilkins of Greensboro, N. C., has been awarded contract for 200 tons of structural steel work in connection with erection of Young Men's Christian Association building; general contract (noted in January) awarded to Central Carolina Construction Co. of Greensboro at \$98,000.

BANK AND OFFICE

Ala., Aliceville.—Merchants and Farmers' Bank has plans by and awarded contract to Linamood & Puckett, Columbus, Miss., for bank building; one story; 30x60 feet; gray pressed brick and sandstone; cost \$31,000. (Recently noted.)

La., Bunkie.—Merchants and Planters' Bank awarded contract to C. D. Stewart, Baton Rouge, La., to enlarge and remodel bank; enameled terra-cotta front; plate-glass windows.

Md., Oakland.—Garrett National Bank awarded contract at \$11,000 to Holbert & Spedden, Fairmont, W. Va., to erect proposed addition to building, and to A. D. Naylor & Co., Oakland, for plumbing.

Miss., Greenwood.—McShane Cotton Co. awarded contract to R. Jesty & Co., Winona, Miss., to erect building; two stories; 50x75 feet; electric lights; concrete sidewalks; cost \$11,500; plans by Frank R. McGeevy, Greenwood.

contract to Goode Construction Co., Charlotte, for proposed office and store building.

N. C., Charlotte.—T. W. Wade awarded (See "Stores.")

N. C., Rutherfordton.—Western Union Telegraph Co. awarded contract to K. J. Carpenter, Rutherfordton, to erect two-story brick building.

S. C., Edgefield.—Farmers' Bank awarded contract to remodel bank building; plans by Macmurry & Story, 18 King Bldg., Augusta, Ga. (Recently noted as having plans for this improvement.)

S. C., Manning.—Home Bank & Trust Co. has plans by and awarded contract to O. W. McRoy, Manning, to erect two-story bank building; fireproof vault; stoves; electric lighting; cost \$3,000.

Va., Alexandria.—Alexandria Water Co. awarded contract to Knight & Rodgers to erect office building.

CHURCHES

Ga., Millen.—Millen Baptist Church awarded contract to J. D. Grandy, Charlotte, N. C., to erect edifice; pressed brick and granite; main auditorium to seat 350; Sunday-school room to seat 500; 14 classrooms; cost \$20,000; plans by Wheeler & Stern, Charlotte, N. C.

S. C., St. Matthews.—Baptist Church awarded contract to Lane & Huggins to erect edifice; cost \$12,000. (Previously noted.)

Tex., Hondo.—Lutheran Church awarded contract at \$27,700 to Hurt & Jones, Hondo, to erect red-brick edifice.

Va., Portsmouth.—Third Baptist Church (colored) awarded contract to J. W. Wells, Portsmouth, to erect edifice; cost \$21,000.

Tex., Victoria.—Victoria Methodist Church

house; frame construction; to be completed by July 1.

S. C., Union.—Fant Bros. Company will erect warehouse; two stories; brick.

Tenn., Waverly.—Slayden & McNabb will erect warehouse in Henry's Addition; two stories; concrete; also erect \$10,000 three-story concrete business building and two-story warehouse, both to be occupied by Hooper & Porch.

Va., Petersburg.—Rodgers, McCabe & Co. will erect brick warehouse.

awarded contract to J. W. Sample, Victoria, to erect edifice; cost \$18,000.

CITY AND COUNTY

S. C., Georgetown.—Fire Station.—City awarded contract to Caldwell Construction Co., Winston-Salem, N. C., to erect fire station; plans by W. W. Hamby, Columbia, S. C. (Previously noted to receive bids until March 20.)

DWELLINGS

Ala., Birmingham.—E. L. Higdon awarded contract to W. A. Meaks, East Lake, Ala., to erect dwelling recently noted; 12 rooms and basement; rustic or sawed whitestone; hot water; gas and electric lighting; cost \$20,000; plans by Harry W. Jones. (See "Machinery Wanted.")

D. C., Washington.—E. A. Hayes, 2111 Bancroft Pl. N. W., has plans by and awarded contract to M. G. Lapey, 467 H St. N. W., Washington, to erect four dwellings at 1429, 1431, 1437 and 1439 Foxall Rd. N. W.; two stories; frame; cost \$6,000.

D. C., Washington.—Millard F. West, 1855 Calvert St. N. W., awarded contract to Cooper Lighthouse, 519 6th St. N. W., Washington, to erect two-story frame dwelling at 3319 Kanawha St. N. W.; cost \$6,000; plans by J. J. Greene, Washington.

Ga., Savannah.—Dr. Julian F. Chisholm awarded contract to Savannah (Ga.) Engineering Construction Co. to erect bungalow at Vernon View; reinforced concrete; cobblestone arches on front porch to support concrete columns; cost about \$4,000.

Ga., Savannah.—Mrs. S. Herman awarded contract to Artley & Simkins, Savannah, to erect dwelling; two stories; ordinary construction; hot-water heat; plans by H. W. Witcover, Savannah. (Recently noted.)

Ky., Elizabethtown.—A. S. McMurtry awarded contract to Alonzo Perry, Elizabeth town, to erect nine-room residence and livery and feed stable.

Md., Baltimore.—John W. Kimple awarded contract to James Watts, 617 N. Fremont St., Baltimore, to erect residence at Forest Park; two and a half stories; frame and shingle; slate roof; concrete foundation; electric lights; hot-water heat; cost about \$4,500; plans by Stanislaus Russell, 2900 Clifton Ave., Baltimore.

Md., Baltimore.—Joseph T. Lawton, 818 Leadenhall St., will expend \$5,000 to erect residence; 49x35 feet; ordinary construction; hot-water heat; electric lighting; heating, lighting fixtures and plumbing not included in contract; general contract recently noted awarded to Willard E. Harn Company, 213 N. Calvert St., Baltimore.

Md., Frederick.—Christian and Elmer C. Ralling awarded contract to Thompson & Myers, Frederick, to erect double brick dwelling; two stories.

Md., Linthicum Heights (not a postoffice). Jos. T. Kelly, Jr., 623 St. Paul St., Baltimore, Md., awarded contract to Sweetser Linthicum, 231 Courtland St., Baltimore, Md., to erect residence; ornamental frame; slate roof; concrete foundation; eight rooms.

N. C., Charlotte.—Jacob Thompson awarded contract to William Beattie, Charlotte, to erect proposed dwelling; two stories; seven room; 26x46 feet; frame; slate roof; electric lighting; plans by Louis H. Asbury, Charlotte.

N. C., Greensboro.—A. Y. Bond will erect two-story frame dwelling; cost \$3,500; shingle roof; hot-air heat; electric lighting; contract awarded to J. R. Truit, Greensboro.

N. C., Greensboro.—James T. Morehead, Jr., awarded contract to Shaw Bros. to erect double tenement-house; cost \$9,000.

N. C., Wilmington.—W. M. Atkinson awarded contract to Rogers & Thomas to erect two-story nine-room residence; cost \$5,000.

N. C., Winston-Salem.—M. M. Murchison has plans by and awarded contract to J. E. Kenerly to erect six-room dwelling; frame; electric lighting; cost \$2,500.

Tex., Beeville.—A. F. Rees awarded contract to erect \$500 residence.

Va., Berkley, Station Norfolk.—J. E. White awarded contract to Mr. Henley, Norfolk, to erect residence.

Va., Luray.—D. I. Stover awarded contract to Helston-Miller Company, Luray, to erect dwelling; 35x48 feet; mill construction; steam heat; electric lighting; cement sidewalks; cost \$4,000; plans by C. L. Proctor. (Recently noted.)

Va., Norfolk.—J. F. Kitterman awarded contract to Charles H. Lowe, Norfolk, to erect two-story frame residence; cost \$4450.

Va., Norfolk.—Harry St. George Tucker awarded contract to C. T. Holtzclaw, Hampton, Va., to erect dwelling; two stories; 32x32 feet; furnace; plans by Wood, Donn & Denning, 808 17th St., Washington, D. C. (Recently noted.)

Va., Norfolk.—W. B. Farant awarded contract to R. H. Stallings, Norfolk, to erect two-story brick residence; cost \$2,500.

Va., Norfolk.—W. H. Harn awarded contract to Griffin Bros., Norfolk, to erect two-story frame residence; cost \$3,000.

Va., Norfolk.—Julia M. Ford awarded contract to Griffin Bros., Norfolk, to erect residence; cost \$500.

Va., Portsmouth.—Charles Syer awarded contract to S. B. Hutchins to erect two double and two single dwellings; two stories; cost \$5,500.

Va., Roanoke.—H. E. Kennedy awarded contract to J. R. Carter, City National Bank Bldg., Roanoke, to erect residence; two stories; brick cased; slate roof; cost \$4,000.

Va., Roanoke.—Mrs. E. Fairbrother awarded contract to J. R. Carter, City National Bank Bldg., Roanoke, to erect brick-cased dwelling; hot-water heat; slate roof; cement cellar; cost \$5,000; construction begun.

Va., Roanoke.—Mrs. Helen Riffe awarded contract to J. R. Carter, City National Bank Bldg., Roanoke, to erect residence; two stories; frame; cost \$3,800.

GOVERNMENT AND STATE

Miss., Jackson.—Hospital.—Trustees of State Charity Hospital awarded contract for erection of State Charity Hospital at \$48,815 to Rensch Construction Co., New Orleans, La., and at \$13,394 to Leubach Plumbing Co. of Jackson for plumbing; plans by Wheelin & Price, Jackson, call for structure 161x177 feet; three stories; pressed brick. (Recently noted to receive bids until April 1.)

HOTELS

Ga., Atlanta.—J. T. Crass awarded contract to Mackie-Crawford Construction Co., Atlanta, to erect apartment hotel at Houston and Pryor Sts.; four stories and basement; slow-burning mill construction; buff brick with terra-cotta trimming; entrance finished in marble; corridor hall laid in mosaic tiling; walls finished in hardwood; bathrooms finished in white tiling and marble; electric light; elevator service; cost about \$55,000; plans by Haralson Bleckley, Atlanta. (Recently noted to erect hotel.)

N. C., Wilmington.—Oceanic Hotel Co. awarded contract to DeRosset & Simmons, Wilmington, to erect four-story tower to hotel at Wrightsville Beach and covered walkway from suburban station to hotel lobby; plans by Grosman & Mahler Architectural & Construction Co., Charlotte. (Previously noted.)

MISCELLANEOUS

Fla., Tampa.—Clubhouse.—Italian Society L'Unione awarded contract to S. A. Walker, Tampa, to erect proposed clubhouse; three stories; brick; cost \$27,617.

Ky., Elizabethtown.—Stable.—J. S. McMurtry awarded contract to Alonzo Perry to erect livery and feed stable, dwelling, etc. (See "Dwellings.")

Miss., Biloxi.—Clubhouse.—J. T. Jones awarded contract to T. J. Russell Manufacturing Co., Biloxi, to erect clubhouse for Mississippi Coast Country Club; two stories; finished on 4x10 pegular beams; cost \$10,000.

Mo., St. Louis.—Monument, etc.—Louisiana Purchase Exposition Co. will award contract to James Stewart & Co., 30 Church St., New York, to erect Jefferson Memorial at De Balivre entrance to Forest Park; Bedford limestone; one wing for exposition purposes; comfort station in portion of basement; cost about \$360,000; plans by Isaac S. Taylor, Mercantile Bldg., St. Louis.

Tex., Shiner.—Walters Bros. awarded contract to Charles Fuess & Son, Cuero, Tex., for erection of brick mercantile building;

48x110 feet; cost \$14,000; plans by J. Henry Yentzen, Yoakum, Tex. (Recently noted.)

RAILWAY STATIONS

La., Abita Springs.—New Orleans & Great Northern Railroad Co., N. G. Pearsall, general superintendent, Bogalusa, La., awarded contract to C. V. Quave, Covington, La., to erect depot to replace burned structure.

SCHOOLS

Fla., Pensacola.—Convent of Perpetual Adoration will expend \$55,000 to erect school building; 170x50 feet, exclusive of galleries; steam heat; electric lighting; plans by Downey & Denham, Mobile, Ala.; contract recently noted awarded to Jett Bros. Contracting Co., Mobile, Ala.

N. C., West Raleigh.—Agricultural and Mechanical College, D. H. Hill, president, awarded contract to J. B. Carr & Co., Atlanta, Ga., to erect building for animal industry and two wings to dormitories; fire proof and ordinary construction; heating and lighting from central plant; cost \$63,000; plans for dormitories by H. B. C. Keller, Raleigh, N. C. (Recently noted.)

Tex., Aransas Pass.—School Board awarded contract at \$18,492 to H. Brooke, Aransas Pass, to erect school; brick; fireproof; electric lights; plans by J. D. McBride. (Recently noted as having received bids.)

Tex., Brookshire.—Brookshire Independent School District awarded contract to Shapley & Son, Houston, to erect two-story brick school; issued \$8000 of bonds.

Tex., Dallas.—Mission Home & Training School awarded contract to Buchanan & Gilder, Dallas, to erect proposed mission home and training school; three stories; solid brick; cost about \$75,000; plans by C. W. Bulger & Son, Dallas.

Tex., Mission.—Mission Independent School Board awarded contract to C. L. Beck, Brownsville, Tex., to erect school building; fireproof construction; cost \$12,000; plans by M. E. Tracey, Brownsville, Tex. (Recently noted.)

Tex., Pecos.—Board of School Trustees awarded contract to C. M. Youngberg, 1411 Nevada St., El Paso, Tex., to erect high-school building; 58x80 feet; ordinary construction; low-pressure steam heat; cost \$25,000; plans by Walter L. Falvey, El Paso, Tex. (Recently noted.)

Va., Orange.—City awarded contract to erect proposed high school building; cost \$18,000.

Va., Richmond.—School Board awarded contract to J. T. Nuckols for erection of Grace Arents School on Pine St., between China and Holly Sts.; brick, concrete and steel; cost \$30,000; plans by Carneal & Johnson, Richmond. (School Board recently noted as asking \$600,000 appropriation for five white and four negro schools.)

STORES

Ark., Little Rock.—Fulk Estate awarded contract to Stanton & Collamer, Little Rock, to erect building to replace burned structure; five stories. (Previously noted to rebuild.)

D. C., Anacostia.—J. Winkler awarded contract to Julius Owens to erect store building; 16x70 feet; hot-water heat; gas lighting; cost \$3000.

D. C., Washington.—G. G. Cornwell & Son, 1412 14 Pennsylvania Ave., N. W., awarded contract to John H. Nolan, 1413 G St. N. W., Washington, to erect four-story building on H St.; cost \$75,000.

Ga., Rome.—Simpson Grocery Co. has plans by and awarded contract to J. F. Dupree & Son, Rome, to erect store building; 66x164 feet; mill construction; electric lighting; cost \$21,000. (Recently noted.)

Miss., Georgetown.—W. W. and F. B. Catching awarded contract to Burke Bros. & Fleming, Slidell, La., to erect three store buildings; 25x70 feet each; pressed brick; plate-glass front. (Recently noted to erect these structures.)

Mo., Kansas City.—Muhlenbach Estate Co., 697 Dwight Bldg., awarded contract to Wallace Love to erect store building; 50x115 feet; cost \$45,000; plans by Hoyt & Cutler, Kansas City; all contracts awarded. (Recently noted.)

N. C., Charlotte.—T. W. Wade awarded contract to Goode Construction Co., Charlotte, to erect proposed store and office building; two stories and basement; 34x35 feet; ordinary construction; steel frame; brick; electric lighting; prism glass for sidewalks; cost \$10,000; plans by Louis H. Asbury, Charlotte.

N. C., Gastonia.—Vernon Grier awarded

contract to erect store building; two stories; brick.

N. C., Lincolnton.—J. K. Kline awarded contract to G. W. McAllister, Lincolnton, to erect building; three stories; brick.

N. C., Winston-Salem.—Mrs. J. H. Fariss awarded contract to J. H. Fariss, Greensboro, N. C., for store building recently noted; 32x50 feet; ordinary construction; electric lighting; cost \$5000 to \$6000; plans by W. C. Northrup, Winston-Salem. (See "Machinery Wanted.")

S. C., St. Matthews.—F. J. Buyck awarded contract to Julian Biler for erection of store building; 40x70 feet; brick; cost \$5000.

S. C., Springfield.—L. M. McMinis awarded contract to B. E. and Lloyd H. Grandy, Pickens, S. C., to erect two store buildings. (See "Machinery Wanted.")

Tex., Bryan.—J. W. Coulter awarded contract to C. E. Jenkins, Bryan, to erect additions to two store buildings on Main St.; two stories; 30 feet long.

Tex., Shiner.—Walters Bros. awarded contract at \$14,000 to Charles Fuess & Son, Cuero, Tex., to erect store building; 48x110 feet; two stories; brick; plans by Henry Yentzen, Yoakum, Tex. (Recently noted as having plans prepared by Mr. Yentzen.)

Tex., Sweetwater.—Lang Aycock will expend \$22,000 to erect business building recently noted at San Angelo, Tex.; 50x115 feet; ordinary construction; prism sidewalk lights set in cement; plans by Parry & Spicer, Sweetwater; contract awarded to Moon & Myers, San Angelo, Tex. (See "Machinery Wanted.")

Va., Roanoke.—T. Carter awarded contract to J. R. Carter, City National Bank Bldg., Roanoke, to erect business building; construction begun.

WAREHOUSES

Ala., Mobile.—J. Zimmer's Company awarded contract to S. E. Dupree & Son, Mobile, to erect grain elevator and warehouse. (See "Miscellaneous Enterprises.")

N. C., Winston-Salem.—R. J. Reynolds Tobacco Co. awarded contract to James O'dway, Winston-Salem, for concrete work and grading for proposed storage house; 26x110 feet; other construction by company's force, in charge of Mr. Solomon.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—The Louisville & Nashville Railroad, it is reported, contemplates building a direct line from Birmingham to Selma, Ala., about 70 miles. W. H. Courtenay is chief engineer at Louisville, Ky.

Fla., Kissimmee.—A letter received indicates that the Southern Colonization Co. is interested in the branch railroad to be built by the Florida East Coast Railroad from its Lake Okeechobee line at Whittier to Basinger, Fla., via Pine Island, Deso and St. George. F. B. Lynch is president and E. H. Armstrong chief engineer of the colonization company at Kissimmee, Fla. Line will be 34.7 miles long. Twenty-seven bridges required from 10 feet to 200 feet long and of pile bent construction.

Ga., Atlanta.—An official announcement confirms the report that the Southern Railway will make extensive improvements between Atlanta and Macon. This will include the laying of about 20 miles of passing tracks and the revision of grades. The tracks, known as lap sidings, will be about five miles apart, and each will accommodate four trains. W. H. Wells is chief engineer of construction at Washington, D. C.

Ga., Dublin.—The Georgia Midland & Gulf Railroad, says a report, will be the name of a line projected by J. H. Plummer of New York, J. R. Crandall of Midville, Ga., and J. A. Hall of Toombsboro, Ga., to extend from Athens via Milledgeville and Dublin, Ga., to the Gulf of Mexico.

Ga., Jackson.—Rumored that the Georgia Power Co. of Jackson is considering a plan to build an electric railway from Montezuma via Oglethorpe to Miona and Reynolds, Ga.

Ga., Macon.—Reported that financing is arranged for constructing the proposed Atlanta, Griffin & Macon Electric Railway from Macon to Atlanta, about 50 miles, at a cost of about \$7,500,000. W. J. Massee of Macon is president.

Ga., Sylvester.—The Gulf Line Railway, says a dispatch, plans an extension from Bridgeboro via Camilla to Bainbridge, Ga., about 25 or 40 miles. Survey is in progress. W. J. Edwards is president at Sylvester, Ga.

La., Delhi.—A movement has been started to build the Delhi, Lake Providence & Mangum Railroad, which will open up timber land. The Delhi Business Men's League can give information. W. E. Monroe is president; W. A. Spirs, vice-president, and W. S. Buchanan, secretary.

La., New Iberia.—The New Iberia, St. Mary's & Eastern Railway Co., which proposes to build a line 52 miles long, will, it is reported, soon begin work. H. A. Genung is chief engineer.

Mo., Frisco.—E. E. Trippe writes that the Osage, Ozark & Springfield Railway is the name of the proposed electric road, and money is subscribed for preliminary survey from Warsaw via Frisco to Cross Timbers. Line will eventually reach Springfield, a total of 90 miles. No date set to receive bids and organization is not completed. One bridge over the Osage River at Warsaw will be required, and several over creeks.

Mo., Shelbyville.—The Shelby Northwest Railroad Co. is chartered to build a line 15 miles long from Shelby to a point on the north boundary of the county; capital \$25,000; incorporators, John A. Hope, Giboney Houck of Cape Girardeau, Mo.; J. H.

Byrd, John Tlapack, H. M. Houck and C. E. Houck.

Mo., St. Louis.—The Missouri Pacific Railway directors, says a dispatch, have approved \$300,000 expenditures for betterments. E. F. Mitchell is chief engineer at St. Louis, Mo.

N. C., Asheville.—A standard-gauge trolley line, says S. Montgomery Smith, will be built from Asheville to Black Mountain, with third rail for narrow-gauge cars of a logging road, which will be built from Black Mountain into timber lands, passing near summit of Mount Mitchell; total length, 41 miles. A local company is organizing.

N. C., Bolton.—The Waccamaw Lumber Co., says a letter, may extend its railroad from Makatoka toward Southport.

N. C., Canton.—The Champion Lumber Co., in which William Whitmer & Sons of Philadelphia are said to be large stockholders, is reported to have purchased the Pigeon River Railroad and the Tennessee & North Carolina Railroad, the former being a new enterprise with its line partially built, and the latter having under way an extension that will connect with the former. J. B. Hart of Clarksburg, W. Va., is president of the Tennessee & North Carolina, and A. J. McMahon is superintendent at Newport, Tenn. R. F. Whitman, president of the Appalachian Railway, Forcing, N. C., may give information as to new construction.

N. C., Washington.—A. M. Dumay, secretary of the Chamber of Commerce, Washington, N. C., says that 6½ miles of the Mattamuskeet Railroad have been graded from Fairfield to Belhaven, N. C., and rights of way are being secured from Belhaven to Washington, 26 miles; will soon begin grading with State convicts; route is level. President of the road is S. S. Mann; treasurer, C. W. Davis, and chief engineer, R. Maxwell. Address A. M. Dumay as above.

N. C., Salisbury.—W. J. Oliver of Knoxville, Tenn., says a dispatch, has bought the Salisbury Street Railway, the interurban line from Salisbury to Concord and the line from Salisbury to Spencer, and will make extensive improvements. Associated with him in the deal are said to be E. G. Oates, T. A. Wright and John M. Ball. The Concord Interurban is yet only a franchise. W. E. Snider is president of the Salisbury-Spencer Railway, but T. J. Jerome, T. H. Vanderford and others are also interested.

N. C., Vineland.—The Whiteville Lumber Co., says a report, is building its permanent railroad line from Vineland to Reaves Ferry, on the Waccamaw River, about 18 miles south. It is completed to within about three miles of the river.

Okla., Jay.—W. O. Fleming of Tulsa, Okla., and Jay, Okla., represents, it is said, a company backing extensive railroad plans. Jay is on the line of a proposed Frisco cut-off from Vinita to Siloam Springs, Ark.

Okla., Miami.—M. C. Harper, general manager of the proposed Oklahoma, Kansas & Missouri Railroad, is quoted as saying that arrangements have been made to extend from Hattenville to Galena and Joplin, Mo., and also to Baxter Springs and Riverton, Kans. Contracts will be let within two months between Lincolnville, Okla., and Baxter Springs. W. T. McCaskey and others of Chicago are said to be interested.

Okla., Oklahoma City.—The Oklahoma City Railway Promotion Co. is reported chartered and organized to build a steam railroad from

Henryetta, Okla., to Oklahoma City and thence northwest to the Kansas boundary, and finally to connect with the Missouri Pacific Railway, about 350 miles. Line will connect with the Missouri, Oklahoma & Gulf at either Henryetta or Weleetka, Okla. C. N. Haskell is president; O. D. Halsell, vice-president; J. H. Johnston, secretary and treasurer, the other directors being C. F. Coleard, A. H. Classen, E. K. Gaylord, R. A. Vose, E. D. Nims, O. P. Workman, E. F. Hisbee and George W. Risser; capital \$300,000, William Kenefick of Kansas City, president of the Missouri, Oklahoma & Gulf Railroad, is also said to be prominently interested as a member of a French syndicate which will finance the proposition.

S. C., Greenville.—Construction has begun by W. J. Oliver & Co. on the Piedmont & Northern Railroad at a point about two miles south of Belton, S. C.

Tenn., Chattanooga.—An officer of the Nashville, Chattanooga & St. Louis Railway says that the contract let to Dunnivant & Co. of Knoxville covers grading for a second track along the present main line from a point near Wauhatchie to a point near Look-out, two miles. It is through rough country.

Tenn., Elizabethton.—The Elizabethton, Milligan & Johnson City Electric Railroad Co., capital \$25,000, has been chartered to build a line from Elizabethton via Oak Grove and Milligan College to Johnson City, Tenn., about eight miles; incorporators, W. G. Payne, James H. Smith, A. B. Brannon, W. C. Burchfield, J. N. Inders and J. G. Burchfield.

Tenn., Henderson.—A member of the committee on the proposed electric railway through Chester county says that no survey has been made and no definite information can be given now. See Manufacturers Record of March 30.

Tenn., Knoxville.—The Southern Railway, it is reported, will build an extension from the Knoxville water-works to the marble quarries, about 2½ miles. W. H. Wells is chief engineer of construction at Washington, D. C.

Tenn., Middleton.—President L. S. Berg of the New Orleans, Mobile & Chicago Railway is quoted in a report from Mobile, Ala., as saying that survey will begin immediately for the contemplated extension from Middleton to Jackson, Tenn., about 40 miles. L. W. Duffee is resident engineer at New Albany, Miss.

Tex., Dallas.—The Southern Traction Co. is reported organized by residents of Waco, Hillsboro, Corsicana, Waxahatchie, Ennis and other points to build an interurban electric railway from Dallas via Waxahatchie, Hillsboro and Italy, to Waco, with a branch to Corsicana via Ennis, altogether about 135 miles. J. F. Strickland of Dallas is president, and he is quoted as saying that contract for the engineering has been let to the Fred A. Jones Company and survey will begin immediately. He is also president of the Texas Traction Co. Other officers of the new company are: Vice-presidents, Osce Goodwin of Dallas, J. E. Whitesell of Corsicana, T. J. Cole of Waxahatchie and James B. Baker of Waco; treasurer, T. A. Ferris of Waxahatchie; secretary, James P. Griffin; assistant secretary, W. H. Painter; general counsel, M. B. Templeton, all of Dallas. Survey is already made between Dallas, Waxahatchie and Corsicana.

Tex., San Antonio.—All subscriptions are reported made to the capital stock of the San Antonio & Mexico Construction Co., which is to build the proposed railroad from San Antonio to Brownsville, Tex., or a point near there. It amounts to \$500,000. George W. West and others are interested in the enterprise and work is expected to begin immediately.

Tex., San Benito.—Official information is that the San Benito & Rio Grande Valley Railway Co. contemplates building about 45 miles. There are 10 miles of track and about 20 more miles graded. Ties and steel rails purchased for 13 more miles of track. The work runs about 800 yards per mile. Hidalgo Construction Co. of San Benito has entire contract. C. E. Ensminger is chief engineer. Road is not incorporated and stands in the name of S. A. Robertson, trustee, who is also general manager. No other officers.

Tex., Belton.—The Belton Commercial Club is considering a proposition that a railway be built from Belton to Holland, about 16 miles southwest. Address The Secretary.

Tex., Fort Worth.—J. R. Hammond, representing the Stone & Webster Engineering Corporation of Boston, is reported to have begun survey for the proposed interurban electric railway from Fort Worth to Cleburne, about 30 miles. G. H. Clifford is manager of the Stone & Webster lines in Fort Worth.

Tex., Sugar Land.—An official letter says that the Sugar Land Railway has built a line connecting it with Anchor, and it is probable that this will be further extended three or four miles to the Brownsville road soon. It is also hoped to extend to Hempstead before long, but there is nothing definite as to when this will be done.

Tex., Temple.—The Southwestern Traction Co., capital \$165,000, is chartered to operate the electric interurban railway between Temple and Belton, besides lines in each city. Improvements may be made. Incorporators, A. F. Bentley, P. L. Downs, W. S. McGregor, W. G. Haag and W. G. Bentley.

Tex., Waco.—The Texas Central Railroad has filed an amendment to its charter to further extend the De Leon branch from Cross Plains to Nolan, about 60 miles. C. Hamilton is vice-president and general manager and H. S. McCall resident engineer, both at Waco, Tex.

Tex., Weatherford.—The Chicago, Weatherford & Brazos Valley Railroad is reported to have graded from Weatherford to Poolville, 18 miles, on its line to Bridgeport, which is 12 or 15 miles farther.

Va., Danville.—Charter is granted in Virginia to the Durham & Danville Railroad Co., which proposes to build from Durham, N. C., to Danville, Va., as heretofore reported. Line will be 51 miles long, of which 16 miles will be in Virginia. Gilbert C. White of Durham is president and J. L. Morehead secretary-treasurer, the other directors being W. F. Carr, G. C. White, Jr., Lathrop Morehead, J. F. Wiley, W. B. Guthrie, H. E. Satterfield, C. McD. Carr and Malcolm Harris.

W. Va., Elkins.—The Coal & Coke Railway, it is reported, will soon resume construction of its line from Roaring Creek Junction into Elkins, on which track has been partly laid. R. H. Pembroke is chief engineer at Elkins, W. Va.

W. Va., Fayetteville.—An officer of the Chesapeake & Ohio Railway says that he knows nothing about any proposition to build an extension along Winding Gulf, four miles, to reach the coal mines of G. W. Bair, Sr. This denies a recent report.

W. Va., Huntington.—The Chesapeake & Ohio Railway Co., it is reported, has decided to build a link 14 miles long to connect the Cabin Creek and the Coal River branches.

H. Pierce is engineer of construction at Richmond, Va.

W. Va., Morgantown.—An officer of the Pittsburgh & Lake Erie Railroad pronounces incorrect the recent report that the company contemplates building an extension from Point Marion, Pa., to the mouth of Cheat River, and thence to connect with the Morgantown & Kingwood Railroad.

W. Va., Pennsboro.—The American Undercurrent Co. of Pittsburgh, H. L. Lambert of Pennsboro, vice-president, plans to build (in an entirely new town called Lambert, one mile from Ellenboro) an electric street railway with cars operated by the American Undercurrent system.

STREET RAILWAYS

Fla., Jacksonville.—The Jacksonville Traction Co., recently chartered under the laws of Massachusetts, will, it is stated, take over the property of the Jacksonville Electric Co. and provide for new bonds to finance proposed improvements and other future betterments. There is no change of control.

Miss., Vicksburg.—The Vicksburg Traction Co., says a report, is considering a proposition that it build an extension from its northern terminus on Washington St. to the National Cemetery, and later from there to Walters. W. B. Moorman is vice-president and general manager.

N. C., Thomasville.—The Thomasville Light & Power Co., owner of the street railway, is reported to have been purchased by the Southern Power Co., and improvements may be made. W. S. Lee is vice-president and chief engineer of the latter at Charlotte, N. C.

Okla., Muskogee.—The People's Electric Railway Co. is reported incorporated to build an electric railway in Muskogee; incorporators, W. M. Patterson, Samuel Spaulding, J. B. McDonald, W. R. Robison, T. H. Martin and J. H. Huckleberry, all of Muskogee, and G. W. Risser of Oklahoma City.

Tenn., Memphis.—The Memphis Street Railway Co. projects a number of improvements to its lines, including the building of considerable new line in the way of extensions, loops and second tracks. T. H. Tutwiler is president and general manager.

Va., Hampton.—The Newport News & Old Point Electric Railway, it is reported, will make repairs and improvements. W. W. Butler is general manager at Hampton, Va.

cavation; 3720 linear feet concrete piling; 514 cubic yards concrete in piers, abutments and retaining walls; 767 cubic yards concrete in arches, girders, columns, beams, floor and railing; 77,600 pounds reinforcing steel in piles; 115,306 pounds reinforcing steel in superstructure; cast-steel hinges, 11,000 pounds; 8 lampposts; 720 yards waterproofing; 4380 square feet cement sidewalks; 920 square yards creosote wood paving blocks; 80 per cent. to be paid by city upon monthly estimates, balance upon completion and acceptance of work; material and work to be in accordance with plans and specifications obtainable from and on file at office of L. A. Washington, City Engineer; bids to be accompanied with certified check for \$1000, payable to E. J. Paxton, City Treasurer; proposals to be made on blanks attached to specifications; usual rights reserved.

Broom Machinery.—E. Leach Canning Co., Berryville, Ark., wants prices on broom machinery.

Brush Machinery.—L. A. Mills, Box 186, Greenville, S. C., wants prices on machinery for brush factory.

Building Materials, etc.—Louis H. Asbury, Charlotte, N. C., wants prices on mantels, grates, Barrett specification roofing, tile and plumbing.

Building Materials.—B. E. & Lloyd H. Grandy, Pickens, S. C., wants prices on steel beams, columns, plate glass and metal ceiling.

Building Materials.—E. B. Weathers, Sr., Elkton, Ky., wants prices on building materials, including electric-light fixtures.

Building Materials, etc.—R. T. Bennett, Wadesboro, N. C., wants prices on building materials, including enameled, fancy and fire brick, cement, hardwood flooring, mantels, office railings, metal shingles, tile, tin, iron stairways and skylights.

Building Materials.—J. H. Fariss, Greensboro, N. C., wants prices on cement, plate glass, plate prisms, roofing, copper trimmings and steel.

Building Materials.—First Methodist Episcopal Church, Rev. W. F. Pitts, pastor, Bristol, Tenn., wants prices on pressed brick, terra-cotta trimmings, stone columns and composition roof.

Building Materials.—St. James Methodist Episcopal Church, Rev. McWirtter, pastor, Tallapoosa, N. C., wants prices on impervious face brick, granite trimmings, steel ceiling, tile, mantels and grates.

Building Materials.—R. F. Beasley, editor Monroe Journal, Monroe, N. C., wants prices on building materials, including mantels, tiles, grates, slate roof, etc.

Building Materials.—H. T. Ham, 114 W. Market St., Greensboro, N. C., wants prices on building materials.

Building Removal.—Bank of Renick, Falling Springs, W. Va., will receive bids on removal of 16x32-foot frame building to rear of lot.

Building Materials.—E. L. Higdon, Birmingham, Ala., wants prices (delivered) on quarter sawed oak or hardwood flooring, panel work for hall, dining-room, material for four built-in wardrobes, refrigerator, china closets and stairway.

Buggy Parts.—J. E. McFarland, Forest City, N. C., wants to correspond with manufacturers of buggy parts.

Canal Construction.—Bids will be received by Cypremort Drainage Board until 2 P. M. April 15 for digging a canal of approximately 129,000 cubic yards. For further information apply to W. F. Giles, secretary, Adeline, La.

Cable.—Office of Chief Signal Officer, Captain A. S. Cowan, disbursing officer, War Department, Washington, D. C., will receive bids until April 14 for furnishing 12,000 feet paper insulated, lead covered submarine cable, type 306, specification 47-B and 36-B, drawing 106, to be furnished in 12 1000-foot lengths; reels will remain property of contractor and returned when empty; new reels will be required; state value of each reel.

Car.—W. J. Brooks, secretary Boley Interurban Railway Co., Boley, Okla., wants to buy (on terms) electric passenger car about 30 feet long; capacity 50 passengers; second-hand preferred.

Cars.—Charlotte Harbor & Northern Railway Co., L. M. Fouts, general manager, Boca Grande, Fla., contemplates purchasing 25 steel phosphate cars, capacity 80,000 pounds; also 25 hopper-bottom gondolas, capacity 60,000 to 80,000 pounds.

Cars.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and S. Penn Sq., Philadelphia, Pa., wants number of (new) body box cars, 60,000 pounds stenciled capacity, allowing 10 per cent. over-

load; length 36 feet; width 8 feet 6 inches; height 8 feet; equipped with Tower M. C. R. automatic couplers, Westinghouse air brakes and hand brakes, diamond frame, arch bar, rigid trucks; also wants several modern vestibule passenger cars, not less than 70 feet long, and several 36-foot new body cabooses.

Cars.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and S. Penn Sq., Philadelphia, Pa., wants prices on number of 80,000 pounds capacity gondola cars, with bottom dump.

Case-hardening Equipment.—See "Metal-working Machinery, etc."

Castings.—Richlands Brick Corporation, Richlands, Va., wants prices on white iron castings.

Cement Machinery.—Dr. Robert Grimshaw, Gredsen A 16, Germany, is interested in machinery for making and utilizing cement.

Cement.—Board of Public Works will receive bids until April 14 for 2000 tons of asphalt cement or materials from which asphaltic cement may be manufactured; this material is to be delivered on side track of municipal asphalt plant; bids are to be accompanied by certified check for \$1000, guaranteeing the successful bidder to enter contract; specifications for materials may be seen in office of Board of Public Works, or may be had upon application at Kansas City, Mo.

Clayworking Machinery.—Guy H. Crook, Ravenswood, W. Va., wants addresses of manufacturers of pottery machinery.

Cosmoant Filter.—See "Mats."

Cold-storage Plants.—R. A. Cooper, Statesville, N. C., wants information relative to cold storage plants—construction, machinery, cost, etc.

Contractors' Tools, etc.—F. D. Harvey, 11 S. 2d St., Memphis, Tenn., wants catalogues and prices on tools, machinery, etc., for general contract work.

Cotton Machinery.—Union Cotton Bagging Corporation, Norfolk, Va., will probably be in market for picker, ginning and mixing machinery.

Crane.—Maryland Equipment & Supply Co., 449 Equitable Bldg., Baltimore, Md., wants prices on Browning No. 8 locomotive crane with special drum.

Cranes.—Kanawha Engineering Co., 808½ Quarrier St., Charleston, W. Va., wants catalogues and prices on cranes. (See "Derrick, etc.")

Derricks, etc.—Kanawha Engineering Co., 808½ Quarrier St., Charleston, W. Va., wants catalogues and prices on portable derricks and cranes for wrecking and handling heavy machinery.

Desks.—R. T. Bennett, Wadesboro, N. C., wants prices on desks.

Drain-tile Plant.—Box 374, Bayou Goula, La., wants information on establishment of plant to manufacture vitrified drain tile; cost of plant, production, machinery, etc.; tile cores to be two to eight inches; plant to have average capacity of 2000 pieces in 10 hours; wood fuel; cost of racks, tracks, etc., to be included in estimate.

Drainage Canal.—Board of Drainage Commissioners, W. E. Barnes, chairman, will let contract at 12 noon June 1 for digging drainage canal and laterals in Ashley county Arkansas; about 700,000 cubic yards; full details as to requirements of bidders, with full plans and specifications of canals and laterals, can be had of W. B. de Yampert, secretary of board, Wilmot, Ark.; further information may be had of R. B. Eggleston, engineer, England, Ark.; usual rights reserved.

Dredge Bucket.—See "Steam Shovel."

Dredging.—Office of Constructing Quartermaster, Fort Moultrie, S. C. Sealed proposals in triplicate for dredging channel in vicinity of White Stake Light, N. W. of Sullivan's Island, S. C., will be received until 11 A. M. April 27; Government reserves right to reject any or all bids; blank proposals, plans and specifications furnished on application; proposals and other communications should be addressed to Constructing Quartermaster, Fort Moultrie, S. C.

Electrical Machinery.—Q. D. Sauls, Tyler, Miss., wants prices on second-hand electrical machinery, including engines and dynamos.

Elevator.—Bona Allen, Inc., Buford, Ga., will buy freight elevator.

Engine.—Eden Manufacturing Co., Salisbury, Md., wants prices on 75-horse-power engine.

Engine.—See "Brick Plant."

Engine and Boiler.—Marshall Brick Plant, W. H. Pugh, general manager, Marshall, Tex., will want 150 to 200 horse-power engine and boiler. (See "Brick Plant.")

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressors.—See "Mining Machinery."

Air Compressor.—Box 213, Newnan, Ga., wants air compressor; two-stage; 1000-foot capacity to 100 pounds pressure.

Aluminum Specialties.—Thomas Grate Bar Co., Valdosta, Ga., wants to correspond with manufacturers of small cast aluminum specialties.

Asbestos Coverings.—Box 374, Bayou Goula, La., wants addresses of manufacturers of asbestos fabric for joint wrappings, etc., in tile drain laying.

Asbestos Products.—Victor Rabe, Edmund-Haus, Catharinenstr. 4/5, Hamburg 8, Germany, wants to correspond with manufacturers of asbestos products; quote prices delivered Hamburg.

Automobile Trucks.—M. M. Biegel, 831 Perdo St., New Orleans, La., wants to correspond with manufacturers of automobile trucks, about eight-ton capacity, to haul 60-foot piling.

Barrel Material.—Calels Lime & Stone Co., W. C. Shackelford, president, 1030 National Bank Bldg., Birmingham, Ala., wants prices on slack barrel material.

Boiler.—See "Brick Plant."

Boiler, etc.—Office of Commissioners of District of Columbia. Sealed proposals will be received until 2 P. M. April 7 for installation of boiler and connections, complete, at Industrial Home School, Wisconsin Ave. and Observatory Lane N. W., Washington, D. C., and for installation of two 190-horse-power Economic boilers at workhouse site, Occoquan, Va. Form of proposal and necessary information may be obtained from chief clerk engineer department, Room 427 District Bldg., Washington, D. C. Cuno H. Rudolph,

John A. Johnston, E. M. Markham (acting), Commissioners, D. C.

Boiler.—Eden Manufacturing Co., Salisbury, Md., wants prices on 75 to 100-horse-power return-tubular boiler, with stack.

Boilers.—J. J. Blocher, proprietor Troy Laundry and Heating Plant, Owensboro, Ky., wants two second-hand 150-horse-power tubular boilers.

Boilers.—Chatham Manufacturing Co., R. F. D. No. 3, Box 123, Savannah, Ga., wants addresses of manufacturers of Scotch marine type of internally-fired boilers.

Boilers.—Q. D. Sauls, Tyler, Miss., wants prices on second-hand boilers.

Brass, Piping, etc.—Wallace Bros., Norfolk, Va., wants jobbers' prices on brass, galvanized, black pipe and pipe fittings.

Brick Plant.—Marshall Brick Plant, W. H. Pugh, general manager, Marshall, Tex., will want 150 to 200 horse-power engine and boiler and other machinery for new brick plant of 50,000 to 60,000 daily capacity.

Bricks.—Southern Building Material Co., Arcade Bldg., Norfolk, Va., wants prices on hollow bricks.

Bridge Construction.—W. M. Martin, secretary Chamber of Commerce, Petersburg, Va., invites specifications and bids on construction of two-span steel toll wagon bridge across Appomattox River; structure to be 250 feet long, 16 feet wide and of 12 tons capacity; approaches will be oak trestle.

Bridge Construction.—Sealed bids will be received at office of Board of Public Works, Paducah, Ky., until 10 A. M. April 17 for construction of reinforced concrete bridge, 43 feet wide, 295 feet long; 170 cubic yards ex-

- Engines.**—Q. D. Sauls, Tylertown, Miss., wants prices on second-hand engines.
- Excavating Machinery.**—A. C. Jones, Box 73, Thibodaux, La., wants trench excavator for digging trenches for water pipe; gasoline driven preferred; new or second-hand.
- Farm Implements.**—H. P. Blount, Box 7, Harlem, Ga., wants information and prices on farm tractors, etc., for plowing, cultivating, hauling, cutting and baling hay, etc. State terms, guarantee, time of delivery, fuel and weight.
- Flooring.**—Bank of Renick, Falling Springs, W. Va., wants prices on tile floor for lobby of bank.
- Flour-mill Machinery.**—Memnona Flour and Grist Mills, M. Wakeman & Son, proprietors, Brock Road, Va., wants estimates on remodeling 20 to 30-barrel reel system to sifter system.
- Foundry Appliances.**—Dr. Robert Grimshaw, Dresden A 16, Germany, is interested in "foundry appliances," including machinery for making soil pipe and fittings; machinery for making hollow ware and enameling; also woodworking and hat-making machinery, etc.
- Furniture.**—John T. Hunt, 603 Walker Ave., Greensboro, N. C., wants prices on mission furniture.
- Gasoline Burner.**—E. S. Jessup, Augusta, Ga., wants prices on gasoline burners, suitable for peanut roasters; wants addresses of manufacturers.
- Glass Tubes.**—Hancock Inoculum Co., Salem, Va., wants addresses of manufacturers of glass tubes. (See "Mailing Cases, etc.")
- Grading.**—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until 5 P. M. April 10 for grading of Avenue C, Avenue D, Avenue E, Avenue F, Elder and Catalpa Aves., etc.; plans and specifications on file in office of City Clerk; certified check, 3 per cent. of bid.
- Grates.**—See "Building Materials," etc.
- Grindstones.**—Victor Rabe, Edmund-Haus, Catharinenstr. 4/5, Hamburg 8, Germany, wants to correspond with manufacturers of grindstones; quote prices delivered Hamburg.
- Handle Machinery.**—National Lumber & Manufacturing Co., Atoka, Okla., wants prices on handle manufacturing machinery.
- Hat-making Machinery.**—See "Foundry Appliances."
- Heating Plant.**—E. B. Weathers, Sr., Elkton, Ky., wants prices on steam-heating plant.
- Heating Plant.**—Bank of Renick, Falling Springs, W. Va., wants prices on installation of hot-water heating plant.
- Hoists.**—Albert Garren, 1317 Butler St., Easton, Pa., wants 10x12 double-drum skeleton hoists; second-hand.
- Hoisting Engine.**—Box 559, Cincinnati, O., wants hoisting engine; 7x10 or larger; single or double drum; for Florida delivery; state condition, particulars and price first letter.
- Hoisting Engine.**—Broad River Tie & Lumber Co., Union Mills, N. C., wants 10-horse power second-hand hoisting engine.
- Ice Machinery.**—D. McKinnon, Winter Garden, Fla., wants addresses of manufacturers of ice machinery.
- Ice Machinery.**—Thos. G. Boswell, Chase City, Va., wants prices on ice machine; capacity 5 to 10 tons; operated by steam.
- Iron Castings, etc.**—U. S. Engineer Office, 320 17th St. N. W., Washington, D. C. Sealed proposals for furnishing and delivering 260 tons, more or less, special iron castings and bolts will be received here until 12 M. April 25, and then publicly opened; information on application; W. C. Langfitt, Lieutenant-Colonel, Engineers.
- Lampposts.**—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until 11 A. M. April 12 for supplying ornamental lampposts to Department of Superintendent of Lamps and Lighting; bids to be in accordance with specifications on file at office of Robert J. McCuen, Superintendent of Lamps and Lighting, City Hall; certified check, \$300.
- Laundry Machinery.**—John T. Hunt, 603 Walker Ave., Greensboro, N. C., wants prices on laundry equipment for private use.
- Lighting Plant.**—E. L. Higdon, Birmingham, Ala., wants prices on installation of lighting plant for \$20,000 dwelling.
- Lighting Fixtures.**—See "Building Materials."
- Lime Manufacturing.**—Calcis Lime & Stone Co., W. C. Shackelford, president, 1930 National Bank Bldg., Birmingham, Ala., will want information relative to hydrating process of manufacturing lime.
- Locomotive.**—J. E. Franks, 729 Candler Bldg., Atlanta, Ga., wants light standard-gauge Mogul or 10-wheeler; 12x18 cylinders; 29 to 35 tons weight.
- Locomotive.**—Charlotte Harbor & Northern Railway Co., L. M. Fouts, general manager, Boca Grande, Fla., contemplates purchasing one passenger locomotive.
- Locomotive Tenders.**—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and S. Penn Sq., Philadelphia, Pa., wants to buy two slope-back standard-gauge tenders. Iron Stairway.—See "Building Materials, etc."
- Lumber.**—West Kentucky Coal Co., W. H. Cunningham, manager, Paducah, Ky., wants prices on cypress, fir or yellow pine lumber for large construction.
- Machine Shops.**—See "Foundry Appliances."
- Machine Tools.**—Sydnor Pump & Well Co., Richmond, Va., wants bolt-threading machine, rod cutters, pipe and rod bending machinery.
- Machine Tools, etc.**—Mercantile & Machine Co., R. Morrison, manager, Laurel Hill, N. C., wants prices on 18x12 engine screw-cutting lathe; 16-inch shaper; small gear cutter; pipe machine and pipe tools; bolt and pipe stock and dies.
- Mailing Cases, etc.**—Hancock Inoculum Co., Salem, Va., wants addresses of manufacturers of mailing cases (especially wood tubes); also glass tubes.
- Mats.**—Ulmer Machinery Co., Tampa, Fla., wants to correspond with manufacturers of coconut fiber mats.
- Mattress Supplies.**—B. F. Gasque, Box 551, Dillon, S. C., wants addresses of manufacturers of or dealers in mattress supplies, such as mattress tufts and twine.
- Mining Machinery.**—Dr. W. H. Smith, Bailey, N. C., wants prices on machinery for mining phosphate rock.
- Metal-working Machinery, etc.**—Success Novelty Co., 618 Cary St., Richmond, Va., wants prices on second-hand stamping press; (new) lathe drills, presses, etc.; also case-hardening outfits and compounds.
- Metal Ceiling.**—Moon & Myers, San Angelo, Tex., wants prices on steel ceiling.
- Metal Workers.**—C. L. Donehue, Gadsden, Ala., wants to correspond with manufacturers relative to placing order for manufacture (on royalty basis) of patented washing machine constructed of 24x18 galvanized-iron and wooden rollers.
- Milling Machinery.**—See "Water-wheels, etc."
- Mining Machinery.**—Albemarle Slate Corporation, Geo. Blow, manager, Esmont, Va., wants prices on channellers and drills, wire saws for stone, steam and belt-driven air compressors, water-tube boilers, double drum hoists and derrick fittings.
- Office Furniture.**—See "Building Materials, etc."
- Oil Products.**—Victor Rabe, Edmund-Haus, Catharinenstr. 4/5, Hamburg 8, Germany, wants to correspond with manufacturers of oil products, including paraffin. Quote prices delivered Hamburg.
- Paper-cone Machinery.**—R. H. Crichton, care of Industrial and Commercial Club, Lumberton, N. C., wants addresses of manufacturers of machinery to make paper cones.
- Paraffin.**—See "Oil Products."
- Paving.**—A. C. Pinson and J. F. Keyser, advertising committee, Williamson, W. Va., will receive bids until April 10 for grading, paving and curbing First, Third, Fourth and Fifth Aves., Pritchard, Dickinson, Harvey, Logan and Vinson Sts.; paving will amount to about 16,000 yards and curbing to about 11,000 linear feet; plans and specifications on file in office of Recorder, City Hall, and of N. H. Manakee, City Engineer, First National Bank Bldg.; bids will be received and considered for work as whole or for paving and curbing separately; bidders to designate in bids what proportion thereof is for grading and paving and what proportion for curbing.
- Paving.**—Board of Control, Norfolk, Va., will receive bids until 12:30 P. M. April 7 for laying cement concrete roadways on Martin's Lane and Hall St., east of Yarmouth; amount, about 1100 square yards; bids to be submitted at price per square yard; cross-section and specifications may be seen at office of W. T. Brooke, City Engineer.
- Paving.**—City of Grenada, Miss., asks bids on construction of 75,000 to 150,000 feet granolithic sidewalks according to specifications on file at office of L. B. James, City Recorder.
- Paving.**—W. A. Fraser, City Clerk, Greenville, Tex., will receive bids until 3 P. M. April 11 for 148,600 square yards of paving and 84,000 linear feet of concrete curb; different kinds of paving to be selected after bids are opened; at least 25,000 square yards will be let in each contract; bids will be received on bitulithic, vitrified brick, creosoted wood blocks, Hassam concrete, vibrolithic, sheet asphalt and asphaltic concrete; each bidder to deposit certified check in sum of \$1000, payable to the Mayor; specifications can be seen at office of City Engineer, J. H. Rush, or E. L. Dalton, consulting engineer, Dallas, Tex.; bidders wanting specifications sent out of city send check for \$3 to cover cost.
- Paving.**—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until 10 A. M. April 11 for construction of various sidewalks, according to plans and specifications on file in office of City Clerk; certified check, 2 per cent. of bid.
- Paving.**—A. W. Farris, City Clerk, Ponca, Okla., will receive bids until noon April 5 for construction of three blocks of brick street paving and eight blocks of macadam, as per plans and specifications on file in office of City Clerk; certified check, 10 per cent. of bid.
- Paving.**—Proposals will be received in office of the City Clerk, Austin, Tex., until 3 P. M. April 15 for 45,700 square yards of street pavement; bids will be considered for vitrified brick, wood blocks and bitulithic pavement; certified check for \$500 required with each bid; plans and specifications in office of City Clerk can be had by deposit of \$5; P. W. Powell, Superintendent of Streets and Public Improvements.
- Pipe.**—Albert Garren, 1317 Butler St., Easton, Pa., wants four and six-inch wrought pipe; second-hand.
- Pipe Stock.**—See "Machine Tools, etc."
- Plumbing.**—See "Building Materials," etc.
- Producer-gas Engines.**—Port Lavaca Telephone Co., Port Lavaca, Tex., wants addresses of manufacturers of producer-gas engines and equipment.
- Pumps.**—Q. D. Sauls, Tylertown, Miss., wants prices on pumps.
- Pumping Engine, etc.**—Sealed proposals, endorsed "Proposal for Triple Expansion Pumping Engine, Boilers, etc.," addressed to Board of Awards, Baltimore, Md., will be received at office of City Register, City Hall, until 11 A. M. April 26 for furnishing, delivering and erecting complete to Water Board of Baltimore 30,000-gallon vertical triple-expansion pumping engine, two batteries of two boilers each, the necessary steam piping between engines and boilers and economizers for heating the feed water, for Mt. Royal pumping station, Baltimore, Md., according to specifications which may be obtained at office of Water Engineer, Alfred M. Quick; certified check, payable to order of Mayor, J. Barry Mahool, and City Council, for \$200; usual rights reserved.
- Rails.**—W. J. Brooks, secretary Boley Interurban Railway Co., Boley, Okla., wants to lease 1½ to 2 miles 40 or 50-pound relaying steel rails for six months with option to buy.
- Rails.**—Broad River Tie & Lumber Co., Union Mills, N. C., wants about 25 tons 25-pound relaying steel rail.
- Road Improvements.**—J. B. Wetherington, Clerk Circuit Court, Jasper, Fla., wants data and suggestions on road improvement.
- Road Roller.**—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until 11 A. M. April 12 for furnishing five-ton tandem steam road roller, delivered f. o. b. Baltimore; specifications and blank proposal sheets can be had at office of B. T. Fendall, City Engineer, upon application.
- Roofing.**—J. E. Curlee, Charlotte, N. C., wants prices on slate roof.
- Sawmills.**—L. A. Mills, Box 186, Greenville, S. C., wants prices on complete sawmill equipments.
- Seating.**—R. T. Bennett, Wadesboro, N. C., wants prices on opera chairs.
- Sewer Construction.**—Joseph Dews, City Clerk, Chickasha, Okla., will receive bids until 10 A. M. April 10 for construction of lateral sewer No. 52 in Sewer District No. 25; also until same date for construction of lateral sewers in Sewer District No. 26; plans and specifications on file in office of City Clerk; each bid to be accompanied by certified check for \$50.
- Sewer Construction.**—City Council, Columbia, S. C., will receive bids until noon April 11 for furnishing materials and constructing circular concrete storm-water drain and appurtenances on Gervais St., between Assembly and Pulaski Sts., in accordance with plans and specifications on file in office of John McNeal, City Engineer; approximate total length of water drains, 2600 linear feet; sizes, 36, 42 and 48 inches inside diameter; certified check, \$100; R. C. Keenan, Council Superintendent of Streets.
- Sewer Construction.**—Board of Bond Trustees, John A. Merritt, chairman, Pensacola, Fla., will receive bids until noon May 2 for construction of storm-water drains and sanitary sewers; work consists of 15,060 linear feet of storm-water drains from 66 to 10 inches in diameter and 23,880 linear feet of sanitary sewer from 24 to 6 inches diameter, with necessary appurtenances; bids to be accompanied by certified check for \$2000; specifications and blank proposal forms can be obtained from Board of Bond Trustees, and full sets of plans can be obtained at same office; deposit of \$10 required for each set of plans furnished; George Rommel, Jr., engineer.
- Sewer Construction.**—City Council, St. Petersburg, Fla., will receive bids until 7:30 P. M. April 13 for construction of sewer system No. 13, beginning at sewer already constructed at First St., in Seventh Alley south, and extending west in Seventh Alley south to Sixth St. south; work to be under supervision of Sanitary Committee and City Engineer, and in accordance with profile, plans and specifications on file in City Engineer's office; certified check \$50; W. F. Divine, City Clerk.
- Sidewalk Lights.**—Moon & Myers, San Angelo, Tex., want prices on sidewalk lights; also prism lights set in copper.
- Signals and Panels.**—Office of Chief Signal Officer, Capt. A. S. Cowan, disbursing officer, War Department, Washington, D. C., will receive bids until 11:30 A. M. April 10 for furnishing Signal Corps with 10 signals, firing, battery commander's specifications 409-A, drawings 326-1, 483b-1, 483c and 483d; six signals, firing pit, with round gongs, specifications 409a, drawings 326-1, 483a-1, 483c and 483d; also four panels, telephone power, style 3, complete, including instruments, mountings, wall supports, etc., in accordance with specifications 299-c and drawings 382a-2, 382b-2, 382d-1 and 382f.
- Steam Shovel.**—Maryland Equipment & Supply Co., 449 Equitable Bldg., Baltimore, Md., wants prices on No. 6 Thew steam shovel on traction wheels, 1½-yard clamshell dredge bucket, with sockets for poles, and one-yard Hayward class E bucket.
- Steam Shovel.**—Box 559, Cincinnati, O., wants shovel; gasoline engine power; 12 yards capacity. Give full particulars and price in first letter.
- Steel Barges.**—U. S. Engineer Office, Kansas City, Mo. Sealed proposals for constructing and delivering steel barges will be received until 12 noon May 1, and then publicly opened; information furnished on application; Edward H. Schulz, Major, Engineers.
- Steel Bars.**—Moon & Myers, San Angelo, Tex., wants prices on corner bars.
- Tile Machinery.**—Guy H. Crook, Ravenswood, W. Va., wants addresses of manufacturers of roofing-tile machinery.
- Tank.**—Maryland Equipment & Supply Co., 449 Equitable Bldg., Baltimore, Md., wants prices on 25 to 35-ton standard-gauge saddle tank.
- Tanks.**—Carolina Bagging Co., Henderson, N. C., wants second-hand oil tank of 5000 to 7500 gallons capacity; tank such as used for carrying oil on cars; do not want car.
- Tractors.**—See "Farm Implements."
- Tile.**—John T. Hunt, 603 Walker Ave., Greensboro, N. C., wants prices on tile for bathroom and kitchen floors and walls.
- Trunk Material.**—Eden Manufacturing Co., Salisbury, Md., wants prices on all kinds of finishing material for trunks, including lining, covering, wood strips, corner irons, locks, etc.
- Turbines.**—J. C. Houston, 50 Church St., New York, wants prices on two 500-kilowatt steam turbines; second-hand.
- Vault Door, etc.**—Bank of Renick, Falling Springs, W. Va., wants prices on fireproof vault door and safety deposit boxes.
- Water Mains.**—City of Columbia, S. C., will receive bids until noon April 11 for furnishing materials and constructing water mains and appurtenances on Gervais St. from Main to Huger St. in accordance with plans and specifications by F. C. Wyse, engineer-superintendent, and on file in his office; each bid to be accompanied by certified check for \$100; W. F. Stieglitz, Council Superintendent.
- Water-works and Equipment.**—Bids will be received until 8 o'clock May 1 by Superintendent of Water-Works, Sherman, Tex., on two deep wells; internal combustion engine; gas producer; air compressor; electric generator; motors; switchboards and power-driven pumps; specifications on file at office of Barney C. Kreager, City Secretary.

Water-works.—Constructing Quartermaster, Fort Dade, Fla., will receive bids until 10 A. M. April 29 for constructing extension to water system. Information on application.

Water-supply Equipment.—James L. Montgomery, Charleston, W. Va., wants prices on tank and hydraulic ram for water supply.

Water-works.—W. B. Jones, City Clerk, City Hall, Ada, Okla., will receive bids until 8 P. M. April 10 for furnishing pipe and machinery to be used in extension and improvement of water-works; bids will be opened before City Council same evening, and bidders are invited to be present and to submit bids on following items: Pipe for construction of approximately 65,000 linear feet of 12-inch pipe line, either of steel or cast iron; if cast iron is used, amount required will be about as follows: Class "B" pipe, 246 tons; Class "C" pipe, 262 tons; Class "D" pipe, 759 tons; total, 3067 tons; if steel pipe is used, 65,000 linear feet of 12-inch O. D. Converse joint pipe will be required; bids will also be received on 3000 linear feet of steel pipe, 3-16 inch thick and 36 inches in diameter; also on cast-iron pipe for extensions to city mains, all Class "B," approximately as follows: 12-inch pipe, 135 tons; 10-inch pipe, 124 tons; 8-inch pipe, 63 tons; 6-inch pipe, 112 tons; total, 464 tons; for special castings, about 15,000 pounds; for furnishing and erecting on foundations to be prepared by city two pumping units, each unit to consist of one horizontal turbine water-wheel, direct con-

nected to multi-stage centrifugal pump, each unit to have capacity of 600 gallons per minute against total head of 185 ft. Plans, specifications, form of contract and proposal and full information may be obtained from consulting engineers, Goodwin & Harper, 920 Scarritt Bldg., Kansas City, Mo.; each proposal to be accompanied by certified check of not less than 5 per cent. of bid, made payable to the City Treasurer.

Water-wheels, etc.—J. S. Jones, Flat Rock, N. C., wants prices on water-wheels and mills.

Wire Cable.—Albert Garren, 1317 Butler St., Easton, Pa., wants lot of 2 to 3½-inch diameter wire cable; second-hand.

Wire Saws.—See "Mining Machinery."

Woodworking Machinery.—See "Handle Machinery."

Woodworking Machinery.—Q. D. Sauls, Tylertown, Miss., wants prices on cant mill or gang saw, resaw, rip saw and planing machines.

Woodworking Machinery.—See "Foundry Appliances."

Wood-pulp Machinery.—D. E. Hinton, Troy, Ala., wants addresses of manufacturers of pulp mills and of hog mills for grinding stabs, etc., from sawmills.

Woodworking Machinery.—Lambeth Furniture Co., J. W. Lambeth, manager, Thomasville, N. C., will receive bids April 6 for kitchen furniture woodworking machinery.

INDUSTRIAL NEWS OF INTEREST

Wants Land for Immigration.

The Minge Mortgage & Realty Co., 2113 First Ave., Birmingham, Ala., wants to buy land suitable for immigration purposes; 10,000 to 25,000 acres in the South, either cut over or Texas land, on or near railroad.

Wants Colonization Land.

A 25,000 to 30,000-acre tract of Southern cut-over land suitable for colonization is wanted by the Minge Mortgage & Realty Co. Landowners having property of this character to dispose of are invited to address the company at 2113 First Ave., Birmingham, Ala.

Reciprocity.

The Triumph Electric Co. of Cincinnati announces that R. F. Pier, formerly foreman of the transfer department of the Canadian General Electric Co., Peterboro, Ont., has severed his connection with that company to accept a similar position with the Triumph Electric Co.

New Concrete Construction Company

The McFarland-Neff Concrete Construction Co. of Fort Worth, Tex., recently organized, has secured several contracts for immediate work, including two miles of concrete sidewalk for Hyde Park Land Co., one mile for the city park board and several miles for Dr. Creager and Frank Hurley, all of Fort Worth.

Wants Branch Managers.

A Richmond corporation marketing a production in use for seven years wants managers who can handle subagents. It offers exclusive rights to towns, cities and counties in the Virginias, Carolinas, Tennessee and Pennsylvania. For information address the Radium Spray Office, 100 N. 7th St., Richmond, Va.

Standing Timber for Sale.

From 10,000,000 to 15,000,000 feet of standing timber on the west side of the North Meherrin River, in Lanesburg county, Virginia, will be offered for sale at auction on April 19. This sale will be held at Kenbridge unless a private sale is arranged before then. For information address W. P. Wallace, Wattsboro, Va.

Securing Enterprises for Norfolk.

Norfolk people are active in securing all kinds of business enterprises for their city. They include the firm of S. L. Nussbaum & Co., offices in Citizens' Bank Bldg., Norfolk, who have just completed arrangements whereby the United Cigar Stores Co. of New York will improve a Norfolk building for a branch store. Nussbaum & Co. also recently induced Messrs. Rosenstein, brokers, of Baltimore, to locate an establishment at Norfolk, and Harry Bothman, lessee of the Lorraine Hotel, to locate there.

In a Humorous Vein.

F. W. Haskell, president of the Carborundum Company, Niagara Falls, N. Y., has contributed in his humorous vein another notable edition to his "Revised American Statesmen Series." This time it is the adventures of Capt. John Smith, who, as Mr. Haskell

puts it, "came of a distinguished family which has made its name heard in all countries and all ages." A copy of the booklet will be sent to anyone asking for it, and it will be sure to beguile the busiest man into a few minutes' leisure while enjoying its unusual humor.

Pauly Jail-Building Co.

D. A. Bennett, formerly City Auditor of Oklahoma City, an architect by profession, has resigned to become Texas representative of the Pauly Jail-Building Co. of St. Louis, with offices in the Flat Iron Building, Fort Worth, Tex.

C. S. & A. C. Steere.

C. S. & A. C. Steere, lumber dealers, Shreveport, La., have established a retail lumber yard in that city, and will handle all grades of lumber and material entering into the construction of modern dwellings, such as roofing, mill work, paints, etc.

Additional Well Contracts.

The Hughes Specialty Well Drilling Co., 96 Ashley Ave., Charleston, S. C., writes that in addition to previous report of contracts received for drilling wells it has just been awarded a contract for a 6-inch by 200-foot to 400-foot well, depending on conditions of finding water, for Charles A. Jones at Oakley, S. C. This company has branch offices at Camden, S. C., and Plant City, Fla.

Taken Under Advisement.

The suit of the Draper Company against the Stafford Company, in which injunction and accounting are sought under patent to G. O. Draper, No. 527,014, was fully argued in the Circuit Court of the United States in Boston before Judge Aldrich on Tuesday, March 21, by W. K. Richardson for the complainant and W. H. Thurston for defendant. The case was taken under advisement by the court.

Skinner Engines in Florida.

H. Cordova Sloan, Florida representative for the Skinner Engine Co. of Erie, Pa., with office in Jacksonville, writes that he has installed two direct-connected 56-horse-power engines for the Government at Fort Dade, connected to General Electric alternators; also is installing a tandem compound direct-connected Skinner engine with Fort Wayne 185-kilowatt generator for the city of Lakeland, Fla.

Linseed-Oil Mill Presses.

The Buckeye Iron and Brass Works, Dayton, O., has furnished to date for Spencer Kellogg & Sons, Edgewater, N. J.; Minneapolis, Minn., and Buffalo, 282 presses for linseed-oil mills. The last 24-press outfit has just been shipped to the Edgewater mills, making 72 presses there, 24 for the Minneapolis mills and 186 for the Buffalo mills. The Spencer Kellogg & Sons firm is one of the largest independent crushers of flaxseed and crushed 12,000,000 bushels of seed during the last year.

Water-Works Pumps.

The borough of South River, N. J., has ordered pumps for its new water-works plant

from the Buffalo Steam Pump Co. of Buffalo. The pumping equipment consists of two five-inch two-stage centrifugal pumps, each having a capacity of 800,000 gallons of water per day against a head of 135 pounds. They will be driven by 75-horse-power 1760 revolutions per minute Fort Wayne motors, manufactured by the Fort Wayne Electric Works, Fort Wayne, Ind.

Big Coal Contract Awarded.

Contract for furnishing coal for the Panama Canal during the year has been awarded to the Pocahontas Consolidated Collieries Co. of Pocahontas, Va., and New York. It was awarded last week at the annual meeting of the stockholders of the Panama Railroad Co., and calls for a maximum amount of 550,000 tons of semi-bituminous coal at \$2.51 per ton.

Increasing Sales of Amalite Roofing.

The Barrett Manufacturing Co., 17 Battery Pl., New York, in calling attention to the advantages of mineral-surface roofing, announces that the advent of "Amalite," with its practical mineral surface, has been hailed with much satisfaction by ready roofing users and that the sales of this roofing have been increasing rapidly. A sample of "Amalite" roofing will be sent to interested persons on request to nearest branch office at New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Pittsburg, Cincinnati, Kansas City, Minneapolis, New Orleans and Seattle.

Flexible Metal Hose.

The demand for hose through which oils and other liquids, steam and air under pressure can be handled is met by the New York Metal Hose Co., 42 Broadway, New York, with its flexible metal hose and tubing for pressures as high as 15,000 pounds per square inch. This company produces flexible-metal hose up to 12 inches internal diameter for manufacturing concerns using high-pressure steam, petroleum, gasoline, linsed oil, turpentine, or for suction hose in phosphate mines, hose for sawmills, rock drills, water and compressed air, vacuum cleaners, and all purposes where a flexible connection is desirable or necessary. This hose, in addition to pressure, will stand any reasonable amount of heat and the action of oil. The U. S. Navy uses this hose for charging torpedoes for a pressure of 4000 pounds per square inch. For steam use the ends or the entire length is covered with asbestos and cotton fabric to permit handling.

Wheeling Secures \$800,000 Contract.

The extent to which Southern industrial plants are reaching for large contracts is evidenced in the announcement that the Wheeling (W. Va.) Mold & Foundry Co. has secured an \$800,000 contract from the United States Government. This contract calls for furnishing donkey engines for the Panama Canal, and that the company named received it became known last week on receipt of a telegram from a representative of the company in Panama. A large portion of the engines and rails will be built at Wheeling and a portion of the contract will be sublet. The Wheeling Mold & Foundry Co. is now at work on a \$2,500,000 contract for bolts and other materials for large gates on the canal, this contract having been sublet by the McClintic-Marshall Construction Co. of Pittsburgh.

Otto Gas Engine Co.'s Developments.

Since Frank Salomon has become president of the Otto Gas Engine Works, 321 Walnut St., Philadelphia, the entire management comes under his charge and the works and offices have been reorganized throughout. Results are shown in the increased manufacturing facilities and greater output at decreased expense, enabling the company to make a reduction in the selling price of the engine while retaining its high standard of excellence. This result having been obtained, President Salomon will now devote his energies to the selling organization, and in addition to the branch offices in Chicago, Boston, New York, Pittsburg, Omaha, Kansas City, Minneapolis and San Francisco, agencies will be established to cover every section of the country. This, with the extensive publicity campaign, should result in larger sales of the well-known Otto gas engines and gas producers than they have ever previously experienced.

Value of Metal Doors in Fires.

John A. Westman, general manager of the Dahlstrom Metallic Door Co. of Jamestown, N. Y., and 299 Broadway, New York, with offices in all the principal cities, makes some interesting observations in regard to the value and importance of metallic doors and trim in fireproof buildings, following the

Washington Square fire in New York and the Albany Capitol fire, where metallic doors and trim were not in use. Attention is called to the fact that the fire in one or two rooms of the Singer Bldg. last September was prevented from spreading from the fact that metallic doors, sash and trim were used. He states that it is not necessary to eliminate the artistic phase, as these metallic fittings may be finished in imitation of hardwoods, etc. Many buildings in New York and other cities of recent construction are fitted with the Dahlstrom doors and trim.

Big Hydro-Electric Generators.

The increased efficiency of power stations gained by the use of large electric generating units has led to the installation of machines of unusual capacity in some of the great power stations. The General Electric Co. of Schenectady recently shipped to the Pennsylvania Water & Power Co., McCalls Ferry, Pa., a three-phase 10,000-kilowatt 11,000-volt water-wheel-driven alternating-current generator designed to operate at a speed of 91 revolutions per minute. It is interesting to note that the shipping weight of this generator was 700,000 pounds, and it required 15 large-capacity cars for its transportation, and it is 27 feet long by 10½ feet high. Three 7500-kilowatt generators of the same type, built by the General Electric Co., are now in service at the McCalls Ferry plant, and a duplicate of the 10,000-kilowatt unit is ready for shipment.

United States Metal Products Co.

The John W. Rapp Company and the J. F. Blanchard Company, both manufacturers of hollow-metal and metal-covered doors, windows and trim, have combined under the name of the United States Metal Products Co. The factory of the John W. Rapp Company, College Point, L. I., covering seven acres, will be continued under the combined management, and the main offices, 26-205 W. 49th St., New York, will be devoted to sales offices and showrooms. The factory building is a four-story structure, 32x72 feet; ground floor devoted to storage and delivery motor truck; second floor for showroom and for executive offices; third floor for sales, estimating and advertising departments; fourth floor for engineering and drafting department. The building is a fireproof structure, equipped with vacuum cleaning apparatus. The United States Metal Products Co. has plans for the erection of an addition to the Rapp plant. These plans include the erection of a shop, 250x600 feet, with saw-tooth roof; a dock 75x600 feet and an employees' bathhouse 50x80 feet.

American Motor Truck Co.

One of the important commercial combinations in the automobile field recently effected is the consolidation of the American Motor Truck Co. and the Lockport Stamping Co. of Lockport, N. Y., and the Findlay Motor Co. of Findlay, O. The plants of the first two named are being moved to the site of the Findlay plant, which is a large one, and additions will be made to accommodate the new plants and to allow for greatly increased business. The executive offices of the consolidated concerns will be at the Findlay plant, and President L. E. Ewing of the Findlay Motor Co. will also be president of the American Motor Truck Co., but the latter company will be operated under the same name as before. The combined capital and outputs of the three companies will make a strong enterprise, which should have a large influence in the automobile and truck industries.

Turbine-Driven Gas Blowers.

The trend of modern practice in gas plants, especially those devoted to the manufacture of water gas, is clearly shown by data tabulated for the Terry Steam Turbine Co., Hartford, Conn. This tabulation gives full particulars of a large number of recently-installed Terry steam turbine gas blowers, of which 25 have been in operation long enough to give reliable results. The most prominent fact gleaned from this tabulation is the increase in blast pressure necessary to give greater output of gas apparatus. Former pressures of 12 to 16 inches of water are now increased 17 to 24 inches. Of the 25 blowers sets under consideration, the average air pressure at the blower outlet is 21 inches, and the maximum is 26 inches. Only six of these were operated at outlet pressures of less than 17 inches, while nine showed 23 inches. Another important fact is the increase in speeds. The gas blowers are driven at much higher speeds of revolution, so that the steam turbine which permits of direct connection is showing surprising adaptability. The speeds vary from 1550 revolutions per minute up to 3300, the variation being

due to different sizes of blowers and different pressures maintained. Other advantages claimed for the steam turbine for this service are the absence of internal lubrication, insuring exhaust steam free from oil, and the simplicity both in design and operation.

Certified Public Accountants.

Suffern & Son, certified public accountants, 165 Broadway, New York, have established an office in Baltimore, 1001 Union Trust Bldg., with Albert M. Doty, certified public accountant, resident partner, in charge. This firm issues information pamphlets bearing on the different branches of accounting systems and is ready to take up the auditing of accounts, the study and analysis of business with view of "effective organization," putting into effect the simplest appropriate system of accounts for a particular line of business, systematizing and auditing mining accounts, revision of accounting methods where necessary, and, in fact, all the usual and advanced work of effective and expert accounting. The department of effective organization aids in securing the most efficient methods in manufacture and business, so combining all the factors that enter into a business as to produce the greatest results at the smallest cost. Such a study and analysis requires special training and experience and the ability to look at the work from an outside perspective, and for this reason the work is that of practical efficiency engineers, under which this department of effective organization has been developed.

TRADE LITERATURE.

Talks About Brick Making.

The Ashland Fire Brick Co., Ashland, Ky., will issue a series of weekly illustrated talks by Savage about brick making and how to overcome brick troubles. The first "illustrated talk" is just out, and the series will be mailed regularly to persons or firms interested in just how Ashland bricks are made.

Otis Elevator Co.'s Publication.

"The Indicator" is a monthly publication issued in the interests of the Otis Elevator Co., 17 Battery Pl., New York, with offices in all the most important cities. It contains several pages devoted to subjects of general interest. The March number contains a brief historical sketch of Savannah, with views of the city hall, Germania Bank Bldg., Citizens and Southern Bank, and National Bank Bldg., all of which are equipped with Otis elevators.

Address on Credit Customs.

An address by W. L. Brownell, treasurer of the Crocker-Wheeler Co. of Amper, N. J., read before the Newark Association of Credit Men, entitled "Should Terms of Payment Be Enforced," has been published by the National Association of Credit Men, 41 Park Row, New York. It deals at length with the subject of credit and terms of payment, and will be read with interest in many lines of business.

"Whitlock" Reliable Rope.

The Whitlock Cordage Co., 46 South St., New York, with factory and warehouses at Jersey City, has issued a folder showing the factory and warehouses and stating the high qualities of the "Whitlock" pure manila rope and drilling cables and describing its sisal rope and lath yarn, hay and hide rope, Russia rope and marline. This company makes a specialty of transmission rope of the "Whitlock" brand.

J. I. Case Catalogues.

The J. I. Case Threshing Machine Co., Racine, Wis., has issued a general catalogue of articles manufactured and sold by it, with explanation of its "cash with order" plan, and prices of each item, which are given as 10 per cent. below "time prices." This catalogue is entitled "A Money Saver for Cash With Order," and contains the usual mail-order information for the company's large variety of machinery, fittings, paints, oils, etc. A list of 42 special catalogues is enclosed, printed on an addressed post card.

Supplemental Advertising.

The Genuine Bangor Slate Co. of Easton, Pa., with quarries at Bangor, Pa., supplements its general advertising by booklets and pamphlets which go into detail of slate subjects and contain items of interest to both user and salesman. "Handshake" in 24 numbers, of which No. 19 has recently been issued, contains interesting information, of which an index is published in No. 12 and No. 21 of the points covered in each particular number. No. 19 contains interesting points on the subject of "getting your price." This company's other booklets are "Roof

Thoughts," "Slate and Its Uses" and "Roofs and Fires."

"Acme" Corrugated Metal Culverts.

The Canton Culvert Co., Canton, O., has issued a folder calling attention to its 1911 "Acme" corrugated-metal culvert catalogue and delivered prices. This catalogue tells of the numerous features and advantages claimed for the "Acme" (nestable) culverts, and is practically a textbook on the subject of corrugated-metal culverts. The folder is a reminder that "Acemes" are made of galvanized No-Co-Ro metal, and a post card is attached with the address of the nearest agent of the company, with order blank.

Hayward Orange-Peel Buckets.

The Hayward Company, 50 Church St., New York, has issued pamphlet No. 508, dealing with the Hayward orange-peel buckets. It contains several views of work being carried out expeditiously by the use of these buckets, and gives detail descriptions of the different types, with the work for which each is adapted. In addition to the orange-peel buckets the Hayward Company handles the Hayward clamshell buckets, steam dredges, excavators, traveling derricks, etc., and will furnish specifications, photographs and prices of buckets upon request.

The Blystone Batch Mixer.

The 1911 catalogue of the Blystone Manufacturing Co., 129 Forest St., Cambridge Springs, Pa., describes the advantages of the Blystone batch mixer and illustrates its construction features in detail. It states that this mixer is the result of the recognized necessity for a moderate-price batch mixer to meet all the requirements of the most careful and intelligent concrete worker at a minimum cost for labor. The price, shipping weight, capacity, etc., are given, together with letters of commendation from its users.

Motor Drive for Metal Working.

"Motor Drive for Metal Working Machinery" is the title of publication No. 4815 of the General Electric Co., Schenectady. The advantages claimed for the use of motor-driven machinery and tools of various kinds are outlined in this booklet and reasons given. Illustrations and descriptions of lathes, drill presses, machining tools individually driven, portable drives, saws, shapers, slotting machines, etc., are included, together with explanation and titles of the various motors applicable to each case. A list of the 41 sales offices of the company in this country and abroad is added for convenience in addressing the nearest office.

Ornamental Iron and Wire Work.

The Buckeye Wire Works, Main and 11th Sts., Columbus, O., in its "Ornamental Iron and Wire Works" catalogue, presents illustrations and descriptions, together with price-lists, of its wire constructions and designs. These include ornamental wire and iron fences, window guards, wire stall guards, trellises for vines, wrought-iron window guards, office railings, flat and round wire cages for banks and stores, elevator enclosures and cabs, corner hay racks, etc. The company will submit estimates or preferably quote net prices upon receipt of full information of requirements.

Roofing Slate.

J. K. Hower, Postoffice Bldg., Slatington, Pa., manufacturer and shipper of slate roofing materials, has published a booklet in which the advantages of slate for roofing purposes are stated and comparisons made with other materials. Recommendations are made as to the proper grades of slate to use for different purposes. Mr. Hower manufactures various kinds of slate materials, including superior blue black, sea green, unfading green, red, Virginia blue, etc., also the best quality of slate blackboards and general slate products. R. J. Kichline is sales agent, Slatington, Pa.

Good Roads and Farm Values.

The Highway Improvement News for April, published by the Tennessee Metal Culvert Co., Nashville, in the interests of its "American Ingot Iron Culverts," is largely devoted to the subject of good roads and road building. Several addresses, extracts and items of interest regarding good roads and the increased value of farm lands along the line of improved roads are included. Views are presented of corrugated culvert that has been in use for years without sign of deflection or deterioration, and one seven-foot diameter American Ingot iron culvert, 20 feet long, located in Jefferson county, Georgia, are shown. Letters of recommendation from various users of these culverts are included.

How the Race Was Won.

A publication of especial interest to people concerned in the use of automobiles and in good roads has been issued. It is entitled "Souvenir of the Grand Prize Race Over the Savannah Course, Savannah, Georgia, November 11-12, 1910." This souvenir is being distributed by the Indian Refining Co. of Cincinnati, which materially assisted in effecting the record-breaking time by satisfactory oiling of the course. The publication contains interesting photographic views of the course, the automobiles and their drivers, the officials, a map of the course and a complete description of how the race was run and won.

Universal Portland Cement Co.

Monthly bulletin No. 82 of the Universal Portland Cement Co., Chicago, Pittsburg and Minneapolis, contains illustrations of several different forms of structures in which its cement has been used, including the reconstruction of the Washington St. tunnel under the Chicago River. A two-page description of this work is given as carried out under the direction of the board of supervising engineers, of which Bion J. Arnold is president and chief engineer. It is stated that sales of nearly half a million barrels have been made to a single railroad within one year, and the company's annual output is given at 10,000,000 barrels.

Marion Excavating Machinery.

The Marion Steam Shovel Co. of Marion, Ohio, entitles its bulletin No. 60 "Marion Excavating Machinery," and describes its steam, electric, traction and revolving shovels; also railroad ditchers, log loaders, ballast unloaders, elevator and dipper dredges and scraper bucket elevators. Numerous illustrations are presented of the machinery at work, and it is stated that the company is at all times ready to give the benefit of its quarter of a century of experience to those interested in the installation of excavating machinery; also that individual catalogues covering the several products of the company are available.

Contractors' Monthly Stock Lists.

The Contractors' Machinery & Supply Co., Steuben and Carson Sts., Pittsburg, publishes a stock list each month, of convenient form for filing for future reference, with each specified article described and reference number attached. This publication also gives general information in regard to the machinery for which the company is agent, also the various hoists, engines, locomotives, pumps, air compressors and other contractors' outfits sold, rented and bought, either new or second-hand. It is stated that anything in the line of contractors' supplies not listed will be promptly obtained in the most economical way.

The Bruce-Macbeth Engine Co.

The Bruce-Macbeth Engine Co. of Cleveland has published a catalogue describing the Bruce-Macbeth gas engines for electric lighting, pumping and all general power purposes, using either artificial, natural or producer gas or gasoline. A table stating comparative fuel costs of different kinds of power is included, with another page on the subject of economy in manufacturing costs. The details of this engine are described, with illustrations, and full-page views of some of the largest engines of this type in operation. The company invites inquiries pertaining to gas power that the benefit of the experience of its engineering force will be accorded.

Nothing Succeeds Like Success.

The Ambursen Hydraulic Construction Co., 88 Pearl St., Boston, and 165 Broadway, New York, presents an interesting history of the company under the title "The Succeeding of Success." The development of this company from a comparatively recent date, 1903, to its present commanding position, with a record of 60 important dams satisfactorily and economically built and large contracts on hand for the immediate future, makes this bit of contemporaneous history of more than technical or local interest. It can be read with profit by everyone interested in developing business through the early stages of hopes and expectations and onto the success which this "history" points out as being based on efficiency. The history is illustrated by 83 views of dams under construction or completed, interiors of dams built on the Ambursen reinforced concrete system, etc. The section devoted to the organization which carries out with signal success the building of the Ambursen dams is instructive and convincing. The work in hand for the immediate future by this company will include detached power-houses, as well as such as are practically connected with the dams;

canals and penstocks, large reclamation projects and constructive work of almost any character and magnitude connected with hydraulics. The highest dam built by the Ambursen company is stated at 150 feet, and the longest one 995 feet. Total value of dams built up to and including 1910 is \$4,200,000, much of which represents the construction of dams for hydro-electric developments in the South.

Directory of Portland Cement, Gypsum and Lime Manufacturers.

The 1911 edition of the "Directory of Portland Cement, Gypsum and Lime Manufacturers," published by the Cement Era, Chicago, contains in condensed form valuable information regarding these enterprises, and will be found of value to those having business dealings with them. The directory is of vest-pocket size, bound in flexible leather, and contains 260 pages. A list of cement companies, which includes those in the United States and Canada, gives the plants in operation now, those being constructed and those being financed. The names of the executive officers, superintendents, chemists, address of office and works, capitalization, daily output, number and size of kilns, wet or dry process, kind of fuel used for burning and power plant capacity are given for each company. The names of officers are also included in an alphabetical list. A list of the brands of cement is also included, and following it are lists of gypsum plants and lime companies and statistics showing the annual output of cement, gypsum and lime for the past 10 years, as reported by the Government.

Robbins & Myers Electric Fans.

Several weeks ago the Manufacturers Record presented two illustrations and data relative to electric fans manufactured by the Robbins & Myers Company of Springfield, O. This company offers a complete line of its "Standard" fans for direct and alternating current circuits, including ceiling fans, desk fans, oscillating fans, exhaust fans, etc. These fans are produced in various styles and sizes to suit varying conditions, and for years have been meeting the demands throughout the South and other sections of this country, besides foreign countries. The company's new catalogue for the season of 1911 contains numerous photographic views of fans, accompanied by data regarding their efficiency and the materials used in their construction, together with classifications and list prices. Users and dealers will find it to their advantage to investigate Robbins & Myers products before placing contracts for 1911.

FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., April 5.

In the Baltimore stock market during the past week there was considerable activity in Seaboard stocks upon rumors that a deal was impending, and the trading witnessed some advances. The list of transactions exhibited sales as follows: United Railways common, 183½; do. trust certificates, 181½ to 183½; do. incomes, 63½ to 63¾; do. funding 5s, 85¾ to 86; do. scrip, 85¾; do. 4s, 84¼ to 84; Consolidated Gas, Electric Light & Power common, 90½; do. preferred, 96; do. 4½s, 87 to 87¾; Consolidated Gas 4½s, 96¼ to 96½; Seaboard Air Line common, 22 to 23¾; do. preferred, 41 to 42; Seaboard Company common, 23½ to 25½; do. second preferred, 53¾ to 56¼; Seaboard 4s, stamped, 86¾ to 87¼; Seaboard 10-year 5s, 100; do. adjustment 5s, 75¾ to 76; Consolidated Cotton Duck preferred, 20; Mt. Vernon-Woodberry Cotton Duck 5s, 73 to 73¼; G.B.-S. Brewing 4s, 45½ to 45.

Bank stock sold as follows: Union, 139 to 137; Mechanics, 29; First National, 148; Bank of Commerce, 31¼.

United States Fidelity & Guaranty sold at 162 to 161½; Fidelity & Deposit, 151; Maryland Trust preferred, 111; Maryland Casualty 95¾, and ex-dividend 92½; Mercantile Trust, 143½; American Bonding, 79.

Other securities were traded in thus: Consolidation Coal, 100½ to 104; Fair-

S. C. Smoaks.—Official: The Bank of Smoaks has made application for a charter. W. H. Varn and others interested.

Tenn. Memphis.—The Memphis State Bank & Trust Co. is reported to have made application for a charter; capital \$25,000; incorporators, J. S. McTighe, W. J. Smith, Theodore Read, R. P. Habberling, L. Horn and H. Horn.

Tenn. Maury City.—Official: The Planters' Bank chartered; capital, \$10,000; incorporators, J. D. Riddick and J. B. E. Zell of Maury City; J. F. Peal, Alamo; R. L. Eason and J. H. Eason of Chestnut Bluff. Business is to begin September 1 or sooner.

Tex., El Paso.—Official: Union Bank & Trust Co. incorporated; capital \$150,000. Business is to begin May 1 with directors thus: E. Maye, president; H. Pfaff, vice-president; A. J. Schurz, cashier; M. Maye, secretary; A. Schwartz, T. M. Wingo and H. Broadus.

Tex., Fort Worth.—Official: The Reynolds Mortgage Co. chartered; capital, \$100,000; E. T. Ambler, president; R. B. Bishop, vice-president and general manager; W. D. Reynolds, vice-president; C. T. Burns, treasurer, and J. S. Manning, secretary. Business has begun.

Tex., Ganado.—First National Bank of Ganado has applied for charter with \$25,000 capital; incorporators, J. E. Harmon of Ganado, E. H. Koch, C. W. McCollister, A. Casper and George T. Everett.

Tex., Houston.—The Tinker Bank & Trust Co. of Houston, capital \$200,000, is reported incorporated by H. N. Tinker, Roy B. Nichols, F. B. Wilkes, Ed S. Phelps and John W. McGuire.

Tex., Lockney.—The Lockney State Bank is reported chartered; capital, \$10,000; incorporators, E. P. Thompson, W. T. Wright, Ed. Reeves and others.

Tex., Meridian.—The Farmers' Guaranty State Bank, capital \$10,000, is reported incorporated by H. C. Hughes, W. E. Sheppard, N. M. Hightower and others.

Tex., North Zulch.—Official: The Farmers' Guaranty State Bank chartered; capital \$10,000. Business is expected to begin in about 20 days.

Tex., Pittsburg.—Reported chartered: First Guaranty State Bank of Pittsburg; capital, \$25,000; incorporators, S. R. Greer, Philip Polinski, W. A. Smith and others.

Tex., Swan.—Official: The First State Bank chartered; capital \$10,000. Business began March 21 with Mark Wheeler, president; E. H. Wood, F. C. Powell and Dr. H. H. Wisdom, vice-presidents, and Bruce Wheeler, cashier.

Tex., Waco.—Official: The Lumbermen's Loan & Security Co. is to be chartered with \$200,000 capital. W. W. Cameron and others interested. Business is to begin about August 1.

Tex., Wichita Falls.—Official: The Wichita Southern Life Insurance Co. chartered; authorized capital, \$300,000; authorized surplus, \$200,000. Business is to begin about April 1 with J. A. Kemp president, E. P. Greenwood vice-president and general manager, E. B. Pate secretary, A. B. Huff assistant secretary and W. M. McGregor treasurer. Business is to begin about April 1.

W. Va., Bluefield.—The Dollar Savings Bank is reported chartered; capital \$25,000; incorporators, J. Lee Harne, W. C. Given, B. W. Dobins, Gamble C. Dick and Eula Jennings Harne of Bluefield.

W. Va., Keyser.—Reported chartered: The Farmers and Merchants' Bank of Keyser; authorized capital \$50,000; incorporators, Richard Gerstell, R. A. Welch, W. C. Long, W. I. Knott, H. G. Wilson, all of Keyser, W. Va.

W. Va., Warwood.—The Bank of Warwood, recently incorporated and chartered with \$25,000 capital, has elected directors thus: August Wasmuth, Howard McDonald, Alfred Paul, Edward Elliott, Henry Kercher, William Stinger, John Lusch, J. W. Weller and H. F. Kenamond. It is expected to begin business about May 1.

W. Va., Winding Gulf.—The Winding Gulf Bank, incorporated with \$25,000 capital, is reported to have elected directors thus: President, John Faulkner of Glen Jean; vice-president, A. M. Herndon of Winding Gulf; cashier, L. N. Frantz of Mullens; John Faulkner, A. M. Herndon, L. N. Frantz, W. E. Deegans, John Laing, J. W. Wilson and P. M. Snyder.

NEW SECURITIES.

Ala., Decatur.—Official: John B. Winkley, Birmingham, Ala., purchased at par \$25,000

of 5 per cent. 30-year city-hall bonds; denomination \$500; dated April 1, 1911. H. A. Skeggs is Mayor.

Ala., Greenville.—Reported voted: \$15,000 of bonds to pay interest on indebtedness and to improve water-works.

Ala., Mobile.—Reported that it is proposed to hold an election to vote on \$600,000 of drainage and sewer bonds.

Ark., Arkadelphia.—William R. Compton company, St. Louis, is reported to have been awarded \$35,000 of 6 per cent. bonds of Sewer District No. 1.

Ark., Texarkana.—Reported that \$70,000 to \$80,000 of 5 per cent. school district bonds will soon be offered for sale.

Ark., Wilmot.—The Board of Commissioners will at noon on June 1 offer at public auction \$50,000 of bonds of Drainage District No. 1, Ashley county. W. E. Barnes is chairman of the board and W. B. de Yampert secretary.

Fla., Palm Beach.—Reported that the election to vote on municipal bonds has been postponed until May 2. The following bonds will be voted on: Sewer system, \$16,000; streets, \$12,000; city dock and seawall, \$32,000; total, \$60,000.

Fla., Pensacola.—The question of holding an election in Escambia county to vote on road and bridge bonds is reported under consideration.

Fla., Pensacola.—Press dispatches state that the question of holding an election to vote on jail, road, bridge and other bonds is under consideration in Escambia county.

Fla., St. Petersburg.—May 9, it is reported, an election is to be held to vote on \$25,000 of 5 per cent. 30-year bonds for purchasing water-front property and for placing crosswalks in city.

Ga., Ashburn.—A bill is reported to have been introduced in the City Council asking that an election be held to vote on \$15,000 of bonds.

Ga., Athens.—Official: The Board of Education has recommended the issuing of bonds for building additional school buildings. Press reports give the amount as \$125,000.

Ga., Barnesville.—April 18, it is reported, an election is to be held to vote on \$35,000 of Gordon Institute Improvement and \$15,000 of water, light and sewer bonds.

Ga., Carnesville.—Reported that an election to vote on \$50,000 of Franklin county road bonds is under consideration.

Ga., Fairburn.—Water and light bonds are reported to have been sold at above par.

Ga., Gordon.—An ordinance is to be introduced in the City Council. It is reported, providing for an election to vote on \$45,000 of bonds.

Ga., Manchester.—Official: John W. Dickey, Augusta, Ga., purchased March 28 the \$10,000 of 5 per cent. 20-year school building bonds voted November 22, 1910; denomination \$1000; dated January 1, 1911; maturity January 1, 1931. James S. Peters is Clerk and Treasurer.

Ga., Roberta.—Reported that the question of holding an election to vote on \$5000 of school-building bonds is under consideration.

Ga., Summerville, P. O. Augusta.—Reported voted: Street, sewer and water-works bonds.

Ga., Thomaston.—Reported that on May 1 an election will be held to vote on \$45,000 of 5 per cent. 20-year water-works and sewerage bonds.

Ky., Hyden.—Bids will be received at any time for \$3500 of 6 per cent. 10-20-year school building bonds; denomination \$500; dated October 1, 1910; maturity October 1, 1930. H. M. Brock is secretary and treasurer Board of Education.

Ky., Lexington.—An official letter says no bond issue contemplated at this time. Jas. J. O'Brien is secretary to Mayor.

Ky., Shelbyville.—An official letter says that nothing is in shape just at present regarding proposed issue of improvement bonds.

La., Hammond.—Press dispatches state that \$100,000 of improvement bonds will probably soon be voted on.

La., Lake Charles.—Reported that \$125,000 of 5 per cent. 40-year sewerage bonds are being offered at private sale.

La., Tallulah.—Official: Bids will be opened April 20 for \$15,000 of 5 per cent. 5-20-year school district building bonds; denomination \$1000. Address C. M. Hughes, superintendent of schools.

Md., Easton.—Official: Bids will be received until 4 P. M. April 15 for \$40,000 of 4 per cent. 1-40-year sanitary sewer bonds; denomination \$1000; dated March 1, 1911. Address John S. McDaniel, Town Clerk, and Martin M. Higgins, Mayor.

Md., Hagerstown.—Official: Voted March

27, \$50,000 of 4 per cent. 10-year park bonds. Address City Treasurer.

Miss., Iuka.—The question of holding bond election in Tishomingo county is reported under consideration.

Miss., Meridian.—Official: Bids will be opened on April 14 for \$100,000 of school and \$75,000 of city hall 4½ per cent. 30-year bonds; denomination \$1000; dated July 1, 1911. Address C. W. O'Leary, City Clerk; J. W. Parker is Mayor.

Miss., Newton.—Reported sold: \$11,000 of electric-light-plant bonds.

Miss., Seminary.—Reported voted: \$10,000 of school-building and water-works system bonds.

Mo., Sedalia.—Reported voted: \$60,000 to improve Liberty Park, a suburb.

N. C., Murphy.—Official: Bids will be received until May 1 for \$50,000 of 5 per cent. 30-year road bonds. Address Highway Commission of Murphy Township, Cherokee county, North Carolina.

N. C., Oxford.—Official: \$20,000 of 5 per cent. school-building bonds are to be issued. Address J. P. Stedman, treasurer of Board of Graded School Trustees.

N. C., Tarboro.—May 1, it is reported, an election is to be held to vote on \$25,000 of water-works improvement and \$25,000 of street-paving 5 per cent. 35-40-year bonds.

N. C., Sanford.—Legislature is reported to have passed a bill authorizing an election in Lee county to vote on \$100,000 of 5 per cent. road bonds.

N. C., Thomasville.—Official: Bids will be opened April 20 by W. O. Burgin, Mayor, for \$75,000 of 5 per cent. 30-year water and sewer bonds; denomination \$1000; dated April 1, 1911; maturity April 1, 1941.

N. C., Franklinton.—Bids will be received until noon April 28 for \$30,000 of 5½ per cent. Franklin township road bonds; dated May 1, 1911; maturity May 1, 1941. Address B. T. Green, secretary of road trustees.

N. C., Whiteville.—F. M. Stafford & Co. of Chattanooga are reported to have been awarded at 103.55 and accrued interest \$10,000 of 6 per cent. 20-year street-improvement bonds. W. E. McDaniel is City Clerk.

N. C., Winston-Salem.—Press dispatches state that W. S. Glenn of Spartanburg, S. C., representing O. B. Leach & Co. of New York City, was awarded the \$100,000 of city refunding bonds as follows: \$55,000 at 4½ per cent. interest, at par, and \$45,000 at 5 per cent., with a premium of \$5.

Okla., Earlshoro.—Reported voted: \$10,000 of school-building bonds.

Okla., Hominy.—The O'Neil Construction Co. of Oklahoma City is reported to have been awarded at par \$26,500 of 6 per cent. 10-25-year water and sewer bonds; denomination \$500.

Okla., McAlester.—An election is to be held, it is reported, to vote on \$150,000 of bonds to build an additional dam and construct water-pipe line.

Okla., Oklahoma City.—Official letter confirms report that A. J. McMahan purchased the \$400,000 of water-works, sewer and hospital bonds.

Okla., Oklahoma City.—Official: Bids will be opened on April 25 for \$75,000 of series 1 to 10, inclusive, and \$125,000 of series 11 to 28, inclusive, 5 per cent. bonds issued against the Public Building Fund. Leo Meyer is State Auditor.

Okla., Tahlequah.—Official: Election held April 4 to vote on \$6000 of 5 per cent. 25-year fire-station and jail bonds; denomination \$100. Bonds will be purchased by sinking fund.

Okla., Tahlequah.—Official: Election April 4 to vote on \$9000 of 5 per cent. 25-year fire-station and jail bonds; denomination \$100. Bonds will be purchased by sinking fund.

S. C., Greenville.—Bids will be received until 8.30 P. M. May 9 for \$100,000 of 5 per cent. street-improvement bonds; denomination \$1000. Address A. E. Sussex, City Clerk and Treasurer.

S. C., Leesville.—Bids will be received until May 1, it is reported, by D. A. Quattlebaum, clerk Board of Trustees, for \$6000 of 6 per cent. refunding and school-improvement bonds; denomination \$500.

S. C., Prosperity.—April 18, it is reported, an election is to be held to vote on \$3000 of 5 per cent. bonds for the retirement of outstanding bonds of Prosperity School District.

S. C., Spartanburg.—J. B. Lee, Mayor, will, it is reported, receive bids until noon May 1 for \$11,000 of 4½ per cent. 20-year refunding bonds.

S. C., Yorkville.—Official: Bids will be received until noon April 25 for \$60,000 of Catawba township and \$14,400 of Ebenezer town-

ship 5 per cent. 15-30-year bonds; dated May 1, 1911; maturity May 1, 1941. Address A. L. Wallace, clerk of Board. T. W. Boyd is Supervisor of York county.

S. C., St. Matthews.—April 12, it is reported, an election is to be held to vote on \$20,000 of bonds for the purpose of aiding Calhoun county in erecting public buildings, including courthouse and jail.

Tenn., Cleveland.—Bradley county, according to press dispatches, proposes to issue \$16,000 of bridge, also school bonds.

Tenn., Chattanooga.—An official letter confirms report that a bill is to be introduced in the Legislature asking authority to issue bonds.

Tenn., Cookeville.—Official: April 8 election will be held to vote on \$100,000 of 4½ per cent. 30-year Putnam county road construction bonds; denomination \$1000; dated April 1, 1911; maturity April 1, 1941. Jas. N. Cox is secretary Good Roads Commission.

Tenn., Dayton.—Press dispatches state that a bill is to be introduced in the City Council providing for an election within 60 days to vote on not exceeding \$25,000 of 5 per cent. 30-year water-works bonds; denomination \$100 and multiples thereof.

Tenn., Memphis.—A bill is reported introduced in the State Senate giving authority to hold an election to vote on \$1,000,000 of bonds, or as much thereof as may be necessary, for establishing or purchasing a municipal lighting plant. The bonds will be 30-year 4½ per cents.

Tenn., Memphis.—A bill is reported prepared providing for the issuing of \$300,000 of park bonds.

Tenn., Nashville.—Official: A. B. Leach & Co., Chicago, Ill., purchased March 22 the \$500,000 of 4½ per cent. 30-year trunk-sewer bonds; denomination \$1000; dated January 1, 1910; maturity January 1, 1940. Address W. L. Murray, City Recorder.

Tex., Archer City.—Official: Voted: \$12,000 of 6 per cent. 40-year water-works bonds; denomination \$500; date of opening bids not yet decided. Address W. C. Young, Mayor.

Tex., Austin.—The Attorney-General has approved securities as follows: \$75,000 of 5 per cent. 20-40-year Jefferson county road bonds; \$20,000 of 5 per cent. 20-year bonds of Hidalgo county common school district No. 2.

Tex., Beeville.—Reported sold: \$30,000 of sewer bonds.

Tex., Bay City.—Press dispatches state that the following districts of Matagorda county are planning to hold elections to vote on school bonds: No. 21, about \$1200; No. 13, \$3500; No. 17, \$10,000; No. 18, \$2500, and No. 3, \$500.

Tex., Blessing.—Reported voted: \$14,000 of bonds of common school district No. 11.

Tex., Brady.—Reported voted: \$40,000 of 5 per cent. 10-40-year water-works bonds.

Tex., Bridgeport.—Reported voted: \$20,000 of school bonds.

Tex., Cameron.—Press dispatches state that the First National, the Citizens' National and the Cameron State Bank have each taken \$5000 of the \$15,000 of 6 per cent. sewerage bonds.

Tex., Comanche.—Reported defeated: \$100,000 of road bonds of Precinct No. 1, Comanche county. Another election will probably be called.

Tex., Crockett.—Official: April 25 election will be held to vote on \$150,000 of 5 per cent. 20-40-year bonds of Road District No. 3, Houston county; denomination \$1000. E. Winfree is County Judge.

Tex., Eagle Lake.—Reported that an election is to be held to vote on \$20,000 of water works plant and sewerage-system bonds.

Tex., Farmersville.—Official: Voted February 11: \$20,000 of 5 per cent. 40-year public free school building bonds; denomination \$500; dated May 1, 1911. Address J. P. Hudleston, Mayor.

Tex., Frisco.—Reported voted: \$13,500 of independent school district bonds.

Tex., Flatonia.—C. E. Mesesta, City Clerk, will, it is reported, receive bids until noon April 15 for \$12,500 of 5 per cent. 10-40-year school bonds.

Tex., Fort Worth.—Official: The \$2,000,000 of 5 per cent. 20-40-year bonds voted January 13, 1911, were purchased by the Commerce Trust Co. and associates, Kansas City, Mo. Bonds are for following purposes: Water-works, \$1,500,000; storm sewer, \$120,000; street improvements, \$165,000; fire stations and police stations, \$120,000; light extension, \$50,000; city warehouse, \$15,000; denomination \$1000; dated April 1, 1911; maturity April 1, 1951.

[For Additional Financial News, See Page 94.]

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WM. INGLE, Vice-Pres. and Cashier.
J. C. WANDS, Asst. Cashier.
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R. E. Bolling, A. Cash. Raymond B. Cox, Auditor.

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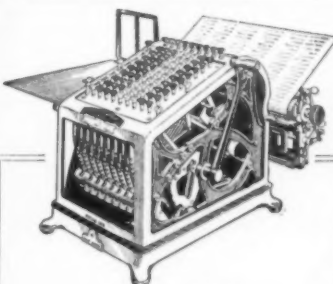
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Tex., Georgetown.—Reported voted: \$100,000 of Precinct No. 2 Williamson county road bonds.

Tex., Goliad.—The question of issuing \$50,000 of Goliad county good-roads bonds is reported under consideration.

Tex., Goldthwaite.—April 25, it is stated, an election will probably be held to vote on \$50,000 of road-building bonds of Precinct No. 1, Mills county. Address Commissioners' Court.

Tex., Groveton.—Reported defeated: \$55,000 of Trinity county courthouse bonds.

Tex., Kountz.—Official: W. A. Myrick purchased March 13 the \$135,000 of 5 per cent. 20-year bonds of road districts Nos. 2 and 3, Hardin county; denomination \$1000; dated April 10, 1911; maturity April 10, 1931. Address County Commissioners.

Tex., Lampasas.—Reported voted: Lampasas county bridge bonds.

Tex., Lampasas.—Reported voted: Lampasas county bridge bonds.

Tex., Lockhart.—Reported voted: \$50,000 of Caldwell county good-roads bonds.

Tex., Maxwell.—The State school fund is reported to have purchased \$1000 of 5 per cent. 20-year independent school district bonds at par.

Tex., McGregor.—Reported voted: \$15,000 of high-school building bonds.

Tex., Memphis.—Reported voted: \$25,000 of road bonds of Precinct No. 1, Hall county.

Tex., Memphis.—Reported voted: \$25,000 of road bonds of Precinct No. 1.

Tex., Orange.—Press dispatches state that an election will probably soon be held to vote on \$12,000 of channel-improvement bonds.

Tex., Petty.—Official: April 29 an election is to be held to vote on \$12,000 of 5 per cent. 10-40-year school building and equipping bonds; denomination \$500. Address A. Collier, president Board of Trustees, Petty Independent School District.

Tex., Roscoe.—Reported voted: Water works bonds.

Va., Boydton.—Reported that the Circuit Court of Mecklenburg county is to be petitioned by the residents of South Hill district to call an election to vote on good-roads bonds.

Tex., Waxahachie.—An official letter says that \$15,000 of 5 per cent. 20-year school-building bonds will be purchased by the sinking funds of the city; denomination \$1000; dated March 21, 1911. J. Gammon is president of the School Board.

Tex., Wichita Falls.—Reported voted: \$15,000 of Wichita county bridge bonds. W. A. Reid is County Clerk.

Va., Chase City.—Reported that the First National Bank of Chase City has been awarded \$15,000 of 6 per cent. bonds for erection of electric-light plant; maturity, 1924.

Va., Colonial Beach.—Reported that the \$37,000 of 6 per cent. 25-year sewerage bonds will soon be put on the market. H. W. B. Williams is Mayor and J. O. Heffin Clerk.

Va., Denbigh.—Press dispatches state that on April 10 school bonds of Denbigh district, Warwick county, will be sold.

Va., Hampton.—Official: The First National Bank of Hampton has been awarded the \$14,000 of 5 per cent. Elizabeth City county refunding bonds; denomination \$1000; dated July 1, 1911; maturity one bond each year, beginning July 1, 1916. Press reports state the bonds sold at \$300 premium. H. H. Holt is clerk.

Va., Marion.—Official: May 2 an election is to be held in Smyth county to vote on \$250,000 of 6 per cent. 30-year bonds for macadamizing and otherwise improving public roads in county; denomination \$100 or multiple thereof. Address Chairman Board of Supervisors.

Va., Norfolk.—Ordinances are reported passed providing for the sale of \$890,000 of 4½ per cent. 30-year street-paving bonds.

Va., Victoria.—Reported voted: \$3000 of high-school building bonds.

W. Va., New Martinsville.—Official: April 19 an election is to be held in Harrison county to vote on \$100,000 of 5 per cent. 10-34-year bonds to aid in construction of Clarksburg Northern Railroad from New Martinsville to Middlebourne, W. Va. Address T. M. Jackson, Clarksburg.

W. Va., Romney.—Official: Voted: \$15,000 of 5 per cent. 20-year water-works bonds; denomination, \$100 or multiple thereof. Bids for same will be opened first Monday in

May. Address A. N. McKeever, Mayor, or C. W. Haines, Recorder.

At Pittsboro, N. C., bids will be received until 2 o'clock May 5 for \$5000 of 5 per cent. 30-year street-improvement bonds. Further particulars will be found in the advertising columns.

At Yorkville, S. C., bids will be received until noon April 25 for \$60,000 of Catawba township and \$14,400 of Ebenezer township, York county, 5 per cent. bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Oklahoma Bankers' Association will meet at Oklahoma City May 24 and 25.

The Nixon State Bank at Nixonville, Tex., has, according to press dispatches, increased its capital from \$25,000 to \$40,000.

The Central Loan & Investment Co., Waco, Tex., is reported to have increased its capital from \$25,000 to \$100,000.

The First State Bank, Alba, Tex., it is reported, is increasing its capital from \$10,000 to \$25,000.

The Citizens' Bank of Bristol, Tenn., is reported to have merged with the First National Bank of Bristol.

The People's Bank of Marion, S. C., is reported authorized to increase its capital from \$30,000 to \$25,000.

The Citizens' Bank of Vidalia, Ga., it is reported, proposes to increase its capital from \$25,000 to \$50,000.

The Metropolitan Bank, New Orleans, La., according to press dispatches, is doing business in its new building at the corner of Camp and Poydras Sts.

The Interstate Trust & Banking Co. of New Orleans, La., according to press dispatches, has purchased the People's Bank & Trust Co.

The Western National Bank of Fort Worth, Tex., has increased its capital from \$300,000 to \$400,000. W. H. Eddleman is president and O. P. Haney cashier.

The Mercantile Trust & Deposit Co. of Baltimore, Md., has published its 1911 booklet descriptive of its system of issuing letters of credit to foreign travelers. The company has \$1,500,000 capital and \$3,000,000 surplus. A. H. S. Post is president; Wilton Snowden, vice-president; J. R. Walker, second vice president; John McHenry, treasurer; T. H. Fitchett, secretary and treasurer, and C. I. Reynolds, assistant secretary.

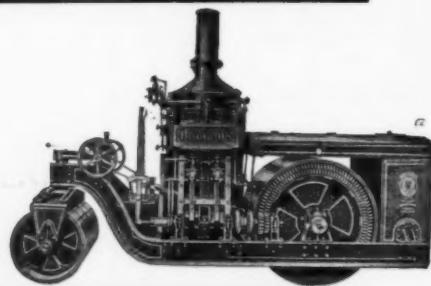
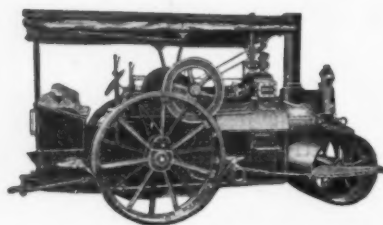
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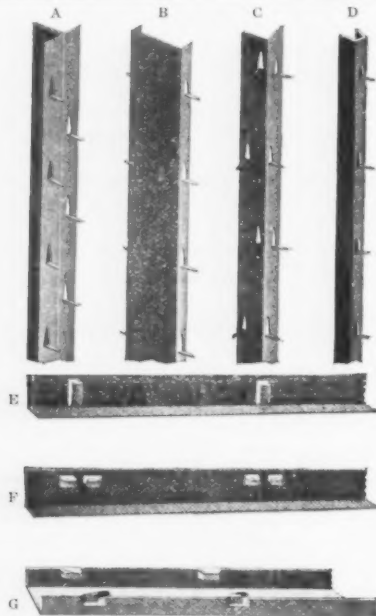
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